Broadband Connectivity Service (BBCS)
Fulfillment Interface Specification

Version	44
Issue date	22.05.2015
Replaces version	43 or previous
Valid from	08.06.2015
Valid until	recalled or replaced by new version
Classification	Technical Support Documentation (BBCS)
Status	released

Contents

Checklist of changes

int.Version	Date	Changed by	Comments / nature of the change
30	21.02.2011	HP	Version WSG-8.3 / Mar11 - BB Schema update: - ISP_CHANGE_DONOR order with new attributes; - some enumerations eliminated - LoV Doc updated
31	27.04.2011	HP	Version WSG-8.4 / Jun11 - BB Schema update: - Ordertypes with new attributes; - LoV Doc updated
32	20.10.2011	HP	Version WSG-8.6 / Nov11 - (SSH)Filetransfer description removed - BB Schema update: - srvQualifType with new elements - plannedEndPoint new type - serviceOrderType with new elements
33	26.03.2012	Roland Staub	Version WSG-9.0 / Mai12 - BB Schema update: - firstInHouse added for fiberQualifAnswer - added termination, sessionType to customerOrderType - Added dslamName to element endPoint in method getSrvServiceStatus
34	17.09.2012	Roland Staub	Version 9.2 / Oct12 - BB Schema update: - Create/modify/get/cancel changeTicket - getCpeReports - added cpeInfo in qualifAnswer, getServiceStatusResponseType
35	25.09.2012	Roland Staub	Updated password policy in Chapter 7.5
36	24.04.2012	Roland Staub	Version 9.4 / Mai13 -BB Schema update. -added Vectoring info -Added addtribute processWithLowPrio to all operations -reorganized endPoint (added instead of dnOffice, bbDeviceLocation, siteCategory in (qualifHistResponseResData)

37	27.05.2013	Roland Staub	Updated, hasFreecapacity was still present, but was deleted on interfacedefinition
38	15.07.2013	Roland Staub	Version 9.5 Aug13
39	15.07.2013	Roland Staub	Version 9.6 Nov13
40	15.07.2013	Roland Staub	Version 9.7 Feb14
41	25.04.2014	Roland Staub	Version 9.8 Mai14
42	08.08.2014	Roland Staub	Version 9.9 Mai14
43	21.01.2015	Roland Staub	Version 9.11 März15
44	19.05.2015	Roland Staub	Version 9.12 June15

Release

int.Version	Date	Released by	Comments / nature of the change
10	20.07.2007	R. Seltmann	Released for WSG-6.6 (June 2007)
17	06.12.2007	R. Seltmann	Released for BBCS Contract Version 12.21
18	11.12.2007	R. Seltmann	Released for BBCS Contract Version 12.3
19	12.02.2008	R. Seltmann	Released for BBCS Contract Version 12.4
20	21.04.2008	R. Seltmann	Released for BBCS Contract Version 13
21	20.10.2008	R. Seltmann	Released for BBCS Contract Version 13-2
22	26.02.2009	R. Seltmann	Released for BBCS Contract Version 13-3
23	26.10.2009	R. Seltmann	Released for BBCS Contract Version 13-31
24	03.03.2010	R. Seltmann	Released for BBCS Contract Version 13-31
25	17.03.2010	Ch. Wäger	Released for BBCS Contract Version 13-31
28	11.05.2010	R. Seltmann	Released for BBCS Contract Version 13-4
29	12.10.2010	H. Künzi	Released for WSG-8.2 (Nov 2010)
30	21.02.2011	A. Studerus (iarope1)	Released for WSG-8.3 (Mar 2011)
31	03.05.2011	H. Künzi	Released for WSG-8.4 (Jun 2011)
32	25.10.2011	H.Künzi	Released for WSG-8.6 (Nov 2011)
33	27.03.2012	H.Künzi	Released for WSG-9.0 (Mai 2012)
35	25.09.2012	H.Künzi	Released for WSG-9.2 (Oct 2012)
36	14.05.2013	H.Künzi	Released for WSG-9.4 (Mai 2013)
37	28.05.2013	H.Künzi	Document update
38	16.07..2013	H.Künzi	Released for WSG-9.5 (Aug2013)
39	28.10.2013	H.Künzi	Released for WSG-9.6 (Nov2013)
40	10.02.2014	H.Künzi	Released for WSG-9.7 (Nov2014)

41	01.05.2014	H.Künzi	Released for WSG-9.8 (Mai2014)
42	08.08.2014	H.Künzi	Released for WSG-9.9 (Aug 2014)
43	17.02.2015	H.Künzi	Released for WSG-9.11 (Mar 2015)
44	26.05.2015	H.Künzi	Released for WSG-9.12 (June 2015)

1 Introduction

1.1 General

This document describes the business-to-business interface for broadband services of the WSG application: it contains detailed technical specification for the implementation of web service (using the SOAP protocol) processes to execute orders, tickets or information requests.

1.2 References

[1] WSG Messages
[2] B2B BB Assurance Interface Specification
[3] ISP BBCS Fulfillment User Manual
[4] B2B Speed Profiles
[5] Actual interface definition **wsgBb_v26.0.0.zip**
[6] LOV document (LOV_ID_Definitions.XLS, included in the " Actual interface definition ZIP-file")

The actual documents are downloadable as PDF files from the WSG application.
The format of the file names is: <document-name>_V<nn>.pdf

1.3 Document updates

In case of changes of this interface Swisscom will provide the ISPs with the latest update of this document at least three weeks before the changes becomes effective.
As soon as the CUG mentioned above is available, updates of this document will be communicated via the CUG.

2 Business Processes

2.1 Overview

This business processes provided by this interface are described by WSDL and XSD files. These files are packed in the ZIP-File

wsgBb_v26.0.0.zip [5]

This ZIP-File contains:

- Readme.txt general information on this file (contents)
- ChangeLog.txt the details of the changes per released version (change-history).
- schema/* the schema definition as well as the web-service definition
  - wsgBbOutbound.wsdl Web Service Definition for WSG Outbound (B2B Interface)
  - wsgLqsSaq.wsdl Web Service Definition for LQS Outbound (SAQ Interface)
- doc/
  - WsgWebOutbound.html a HTML-based documentation of the B2B Interface
  - ServiceAvailabilityQualification.html a HTML-based documentation of the SAQ Interface

How to use samples can be found in the B2B_Web_Service_Tutorial.doc

The XML schemas are shared by two Web Service Definitions (WSDL):

- **wsgBbOutbound.wsdl**: Defines the B2B services. This services provides the The server implementation of this services is deployed on **WSG** Outbound (URL: https://webservices.swisscom.com/wsg/prod/bb/WsgBbVxxx)
- **wsgLqsSaq.wsdl**: Defines the Service Availability Services (SAQ) The SAQ provides a quick Qualification of a possible broadband connections. The SAQ gives a first overview. The server implementation of this services is deployed on **LQS** Outbound (URL: https://webservices.swisscom.com/wsg/prod/lqs/LqsQualiVxxx)

The following table provides an overview of the available business processes (operations) for B2B-Fulfillment and there deployment as web services:

Business Process / Operation	B2B Web Service	SAQ Web Service
srvQualifByNumber	X	X
srvQualifByAddress	X	X
srvQualifByLlid	X	X
srvQualifByStartPoint	X	X
srvQualifBySocket	X	X
srvQualifByBindingId	X	X
getQualifHistory	X	
getSrvStatus	X	
createCustomerOrder	X	
getTransactionOverview	X	
getOrderDetail	X	
getTdmMsgDetail	X	
getOrderGroupNr	X	
cancelPendingOrder	X	
getInstallationTicketDetail	X	
createInstallationTicket	X	
modifyPendingInstallationTicket	X	
cancelPendingInstallationTicket	X	
getBusinessLines	X	
createChangeTicket	X	
modifyPendingChangeTicket	X	
cancelPendingChangeTicket	X	
getChangeTicketOverview	X	
getChangeTicketDetail	X	
getCpeReport	X	

2.2 Qualification: srvQualifByXxxx

2.2.1 srvQualifByNumber

Purpose: Gets information on possible broadband connections to a given destination by DN/VN/NSN.

2.2.1.1 REQUEST: srvQualifByNumber

Element	Type	Occ	Comment
	srvQualifType	1..1	
dnVnNsn	xs:string (pattern:0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.

2.2.1.2 Response: srvQualifByNumberResponse

Element	Type	Occ	Comment
response	qualifAcknowledgeType	1..1	The acknowledge message returned after processing a qualification request.

2.2.2 srvQualifByAddress

Purpose: Gets information on possible broadband connections to a given destination by address

2.2.2.1 REQUEST: srvQualifByAddress

Element	Type	Occ	Comment
	srvQualifType	1..1	
address	***subjectAddressType***	1..1	A subject's postal address.

subjectAddressType

Element	Type	Occ	Comment
street	xs:string (minLength:**1**, maxLength:**30**)	0..1	The street name of an address.
houseNr	xs:string (minLength:**1**, maxLength:**12**)	0..1	The house number of an address.
building	xs:string (minLength:**1**, maxLength:**30**)	0..1	The building infomation of an address.
zip	xs:int (minInclusive:**1000**, maxInclusive:**999999**)	0..1	The zip of an address.
city	xs:string (minLength:**1**, maxLength:**25**)	0..1	The city of an address.
additionalCity	xs:string (minLength:**1**, maxLength:**25**)	0..1	The additional city information of an

			address.
firstName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's first name.
lastName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's last name.

2.2.2.2 RESPONSE: srvQualifByAddressResponse

Element	Type	Occ	Comment
response	***qualifAcknowledgeType***	1..1	The acknowledge message returned after processing a qualification request.

2.2.3 srvQualifByLlid

Purpose: Gets information on possible broadband connections to a given destination by LLID

2.2.3.1 REQUEST: srvQualifByLlId

Element	Type	Occ	Comment
	srvQualifType	1..1	
llId	xs:string (minLength:1, maxLength:13)	1..1	The local loop ID.

2.2.3.2 RESPONSE: srvQualifByLlidResponse

Element	Type	Occ	Comment
response	***qualifAcknowledgeType***	1..1	The acknowledge message returned after processing a qualification request.

2.2.4 srvQualifByStartPoint

Purpose: Gets information on possible broadband connections to a given destination by Start Point

2.2.4.1 REQUEST: srvQualifByStartPoint

Element	Type	Occ	Comment
	srvQualifType	1..1	
startPoint	***startPoint***	1..1	A start point.

startPoint

Element	Type	Occ	Comment

taxRegion	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").
accessNet	xs:string (minLength:**1**, maxLength:**5**)	1..1	The access net part of a start- or end-point (e.g. "ALL").
unitType	xs:int	1..1	
unitNumber	xs:int	1..1	
sse	xs:int	1..1	
contactType	xs:int (totalDigits:3)	0..1	[LOV-ID: 0115] The type of contact for UP.
contactNr	xs:int (totalDigits:6)	0..4	The contact number for UP.
upPreparation	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1070] Copper minimal development (1 = Normal, 2 =Copper minimal development, 3...5 = Reserve)

2.2.4.2 RESPONSE: srvQualifByStartPointResponse

Element	Type	Occ	Comment
response	***qualifAcknowledgeType***	1..1	The acknowledge message returned after processing a qualification request.

2.2.5 srvQualifBySocket

Purpose: Gets information on possible broadband connections to a given destination by Start Point

2.2.5.1 REQUEST: srvQualifFiberType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
basisContrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A basis contract element ID
contrEleId	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0320] A contract element ID.

bbType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0109] The DN type.
qualifExtRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference (assigned by the ISP) for identification of the qualification request.
customerWishDate	xs:date	0..1	The customer wish date.
sfSlaId	xs:int (totalDigits:3)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
choice	<table><tr><th>Element</th><th>Type</th><th>Occ</th></tr><tr><td>socketId</td><td>xs:string (minLength:**13**, maxLength:**19**)</td><td>1..1</td></tr><tr><td>cooperationId</td><td>xs:string (maxLength:**100**)</td><td>1..1</td></tr></table>	1..1	A socket id or a coorporation Id
plugNr	xs:int (totalDigits:3)	0..1	A plug number (1..4).
businessType	xs:int (totalDigits:3)	0..1	[LOV-ID: 1301]: Business Type (New, Relocation, Product Change...)

2.2.5.2 RESPONSE: srvQualifBySocketResponse

Element	Type	Occ	Comment
response	***qualifAcknowledgeType***	1..1	The acknowledge message returned after processing a qualification request.

2.2.6 srvQualifByBinding

Description: This operation returns service qualification and resource availability statements for a given request by Binding ID only.

2.2.6.1 REQUEST: srvQualifBySocket

Element	Type	Occ	Comment
basisContrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A basis contract element ID
contrEleId	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0320] A contract element ID.
bbType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0109] The DN type.
qualifExtRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference (assigned by the ISP) for identification of the qualification request.
customerWishDate	xs:date	0..1	The customer wish date.
synchWithVoice	xs:boolean	0..1	Synchronize with voice.
lineState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1052] The copper line state.
newLoop	xs:boolean	0..1	Qualify for a new loop.
sfSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
hasOnp	xs:boolean	0..1	
businessType	xs:int (totalDigits:**3**)	0..1	
bindingId	xs:string (maxLength:**15**)	1..1	The binding id (e.g. AC1.222.333.444).

2.2.7 srvQualifByBindingResponse

Element	Type	Occ	Comment
response	***qualifAcknowledgeType***	1..1	The acknowledge message returned after processing a qualification request.

2.2.8 Common Request Elements for all Copper srvQualif-Operations: srvQualifType

srvQualifType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
basisContrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A basis contract element ID
contrEleId	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0320] A contract element ID. Isn't evaluated by Service Availability Qualification-Service
bbType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 0109] The DN type.
qualifExtRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference (assigned by the ISP) for identification of the qualification request. Isn't evaluated by Service Availability Qualification-Service
customerWishDate	xs:date	0..1	The customers wish date. Isn't evaluated by Service Availability Qualification-Service
synchWithVoice	xs:boolean	0..1	Synchronize with voice. Isn't evaluated by Service Availability Qualification-Service
lineState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1052] The copper line state.
newLoop	xs:boolean	0..1	Qualify for a new loop.
sfSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.

			Isn't evaluated by Service Availability Qualification-Service
hasOnp	xs:boolean	0..1	Has Operator Number Portabilty Isn't evaluated by Service Availability Qualification-Service
businessType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1301]: Business Type (New, Relocation, Product Change...) Isn't evaluated by Service Availability Qualification-Service
appointment	Element / Type / Occ / Comment appointmentId / xs:long (totalDigits:**10**) / 1..1 / Appointment ID referencing an existing agreement. appointmentDateTime / xs:dateTime / 1..1 / Date and Time of an Appointment	0..1	Isn't evaluated by Service Availability Qualification-Service

2.2.9 Response Elements for all srvQualif-Operations

qualifAcknowledgeType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
dnStnr	xs:string (pattern:0[1-9]\d{8})	0..1	The DN "Stammnummer".
qualificationResult	qualificationResult	0..n	Represents a technology (bbType) specific quali response. A list of qualification answers for this particular BB type and service mix

			combination. LQS Service Availability Qualification Interface: qualifAnswer occurs only once

qualificationResult

Element	Type	Occ	Comment
contrEleId	xs:int	0..n	
bbType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0276] The BB type.
dnType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0109] The DN type.
qualifNr	xs:long (totalDigits:**10**)	0..1	
lineState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1052] The copper line state.
Choice	Element / Type / Occ / Comment qualifAnswer / qualifAnswer / 1..n fiberQualifAnswer / fiberQualifAnswer / 1..n	1..1	

qualifAnswer

Element	Type	Occ	Comment
quali ResultState	xs:string (Enumeration: `ok`, `ok_stao`, `planned`, `nok`)	0..1	[LOV-ID: 1053] State of the Qualification Result.
quali ResultDetail	Element / Type / Occ / Comment result Code / xs:string (minLength:1, maxLength:4) / 1..1 / Qualification Result Code result Comment / xs:string (minLength:1, maxLength:256) / 1..1 / Some additional textual description for the result.	0..n	
endPoint	Element / Type / Occ / Comment taxRegion / xs:int (totalDigits:3) / 0..1 / [LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62"). accessNet / xs:string (minLength:1, maxLength:5) / 0..1 / The access net part of a start- or end-point (e.g. "ALL"). site / xs:string (maxLength:4) / 0..1 / Site of the Broad Band Device Location. siteCategory / xs:int (totalDigits:3) / 0..1 / [LOV-ID: 9008] The site categorization. bbDeviceLocation / xs:string (minLength:1, maxLength:20) / 0..1 / The broad band device location. (e.g. "AES")	0..1	An end point (consisting of a DN office and a BB device location).

<table>
<tr>
<td>planned EndPoint</td>
<td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>taxRegion</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").</td></tr>
<tr><td>accessNet</td><td>xs:string (minLength:1, maxLength:5)</td><td>0..1</td><td>The access net part of a start- or end-point (e.g. "ALL").</td></tr>
<tr><td>site</td><td>xs:string (maxLength:4)</td><td>0..1</td><td>Site of the Broad Band Device Location.</td></tr>
<tr><td>bbDevice Location</td><td>xs:string (minLength:1, maxLength:20)</td><td>0..1</td><td>The broad band device location. (e.g. "AES")</td></tr>
<tr><td>equipped Date</td><td>xs:string (pattern:2[0-9]{3}(-[01][0-9](-[0-3][0-9])?)?)</td><td>1..1</td><td>PUS Date (Format: yyyy-mm-dd, yyyy-mm or yyyy)</td></tr>
<tr><td>equipped Date Quality</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[There are different building process. Depending on which phase it is, the equippe date quality is different. The target values are (only for information):1:= 99.9%; 2:= 99%; 3:= 97%; 4:= 95%; 5:= 75%; 9x:= are exception cases; 99:= abort of a building process; 98:= end date is over but it is not usable at the moment</td></tr>
<tr><td>equipped Date Comment</td><td>xs:string</td><td>1..1</td><td>The equippedDate embedded in a comment string</td></tr>
<tr><td>planned Speed</td><td>duplexSpeedType</td><td>1..1</td><td>The planned bitrate (up/down).</td></tr>
<tr><td>equippedDateHistory</td><td>equippedDateHistory</td><td>0..n</td><td>Equipped Date History: list the last 3 changes (if there are some) Sort number: 1 (nearest) ... 3 (oldest) [LOV-ID: 1324] LOV_EQUIPPED_DATE_EVENT_TYPE 1=TargetDateChange; 2=ValidityClassException If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9]))((-[0-3][0-9])); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98</td></tr>
<tr><td>extension</td><td>xs:int</td><td>1.</td><td>[LOV-ID: 9023]</td></tr>
</table>
</td>
<td>0..1</td>
<td>A planned end point (plannedEndpoint wird abgefüllt, wenn bekannt ist, dass der Startpunkt in Zukunft von einem neuen Breitbandziel bedient wird.).</td>
</tr>
</table>

<table>
<tr><td></td><td><table>
<tr><td>Category</td><td>(totalDigits:3)</td><td>.1</td><td>LOV_EXTENSION_CATEGORY: Ausbau Kategorie: 1 = PUS Neubau; 2 = FTTS/B Neubau; 3 = Vectoring Ausbau/Aktivierung</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>cpeInfo</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>cpeName</td><td>xs:string (maxLength:100)</td><td>1..1</td><td>CPE (Customer Modem) Name</td></tr>
<tr><td>dslamTypeAllowed</td><td>dslamTypeAllowed</td><td>0..n</td><td>DSLAM Type(s) which are supported from the cpe - only current Technolgoie is in focus</td></tr>
<tr><td>vectoringCapability</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 9009] Vectoring Capability (1 = vectoring capable (Ok); 2 = friendly (Ok); 3 = Alien (NOk); 4 - unknown (alien))</td></tr>
<tr><td>comment</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>A comment.</td></tr>
</table></td><td>0..1</td><td>Information about the CPE.</td></tr>
<tr><td>max AccessSpeed</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>speed ProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr>
<tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr>
</table></td><td>0..1</td><td>The speed profile identifying the maximum possible access speed.</td></tr>
<tr><td>averageFlag</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1050] The average flag marking the average answer within a multi-answer qualif response (0=The non-average qualif answer; 1=The average qualif answer (strict address qualif); 2=The average qualif answer (fuzzy address qualif)).</td></tr>
<tr><td>billingZone</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1503] The billing zone.</td></tr>
<tr><td>fulfilment</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
</table></td><td>0..n</td><td>A list of fulfillment</td></tr>
</table>

<table>
<tr>
<td>TimeSlot</td>
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<table>
<tr><td>fulfillment TimeSlot QualifIndex</td><td>xs:long (total Digits:10)</td><td>1..1</td><td>The index identifying a profile within a qualification response.</td></tr>
<tr><td>fulfilment TimeSlotStart</td><td>xs: dateTime</td><td>1..1</td><td>Start Date Time of the Fullfillment Time Slot</td></tr>
<tr><td>fulfilment TimeSlotEnd</td><td>xs: dateTime</td><td>0..1</td><td>End Date Time of the Fullfillment Time Slot</td></tr>
</table>
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<td></td>
<td>time slots</td>
</tr>
<tr>
<td>startPoint</td>
<td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>tax Region</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").</td></tr>
<tr><td>access Net</td><td>xs:string (minLength:1, maxLength:5)</td><td>1..1</td><td>The access net part of a start- or end-point (e.g. "ALL").</td></tr>
<tr><td>unit Type</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>unit Number</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>sse</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>0..4</td><td>The contact number for UP.</td></tr>
<tr><td>upPreparation</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1070] Copper minimal development (1 = Normal, 2 =Copper minimal development, 3...5 = Reserve)</td></tr>
</table>
</td>
<td>0..1</td>
<td>A start point.</td>
</tr>
<tr>
<td>address</td>
<td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>street</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>The street name of an address.</td></tr>
<tr><td>houseNr</td><td>xs:string (minLength:1, maxLength:12)</td><td>0..1</td><td>The house number of an address.</td></tr>
<tr><td>building</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>The building infomation of an address.</td></tr>
<tr><td>zip</td><td>xs:int (minInclusive:1000, maxInclusive:999999)</td><td>0..1</td><td>The zip of an address.</td></tr>
<tr><td>city</td><td>xs:string (minLength:1, maxLength:25)</td><td>0..1</td><td>The city of an address.</td></tr>
<tr><td>additionalCity</td><td>xs:string (minLength:1, maxLength:25)</td><td>0..1</td><td>The additional city information of an address.</td></tr>
</table>
</td>
<td>0..1</td>
<td>The address associated with this start point.</td>
</tr>
<tr>
<td>resource Availability</td>
<td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>available</td><td>xs: boolean</td><td>1..1</td><td>true if the resource is available, else false.</td></tr>
<tr><td>resource Type</td><td>xs:int (total Digits:3)</td><td>1..1</td><td>[LOV-ID: 1055] Resource Type (1 = Port; 2 = Copper).</td></tr>
<tr><td>upgrade</td><td>xs: date</td><td>0..1</td><td>The planned upgrade</td></tr>
</table>
</td>
<td>0..n</td>
<td>A list of resource availability statements. true if the resource is available, else false. The planned upgrade time if resource</td>
</tr>
</table>

<table>
<tr><td></td><td><table><tr><td>PlanDate Time</td><td>Time</td><td></td><td>time if resource unavailable.</td></tr></table></td><td></td><td>unavailable.</td></tr>
<tr><td>qualifProfile</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>qualif Index</td><td>xs:long (totalDigits:10)</td><td>0..1</td><td>The index identifying a profile within a qualification response.</td></tr><tr><td>nrOfWires</td><td>xs:int (totalDigits:2)</td><td>0..1</td><td>The number of wires (only copper).</td></tr><tr><td>used AccessSpeed</td><td>speedProfileType</td><td>0..1</td><td>A speed profile type. (speedProfileNr + description)</td></tr><tr><td>service Speed</td><td>speedProfileType</td><td>1..1</td><td>A speed profile type. (speedProfileNr + description)</td></tr><tr><td>effective Speed</td><td>duplexSpeedType</td><td>0..1</td><td>The effective speed. (up / down)</td></tr></table></td><td>0..n</td><td>Represents a speed profile making up a part of a qualification result.</td></tr>
<tr><td>current DnType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0109] The current DnType (only set by the LQS Service Availability Qualification)</td></tr>
<tr><td>current AccessSpeed</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfile Nr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr><tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>The current access speed profile</td></tr>
<tr><td>llId</td><td>xs:string (minLength:1, maxLength:13)</td><td>0..1</td><td>The local loop ID.</td></tr>
<tr><td>llDate</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>activationDate</td><td>xs:date</td><td>0..1</td><td></td></tr><tr><td>disconnectionDate</td><td>xs:date</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>Local Loop Date</td></tr>
<tr><td>jumperAction</td><td>xs:boolean</td><td>0..1</td><td>Ueberfuehrungsrelevant (true/false).</td></tr>
<tr><td>bbr Recommendation</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1051] Broadband ready recommendation of Field Service (FS) Installation: 0 = na (it is not possible to give a self install recommendation); 1 = BBR necessary (no self</td></tr>
</table>

			install recommended); 2 = no BBR necessary (selfinstall possible); 3 = no BBR necessary (selfinstall possible); 4 = BBR necessary (no self install recommended); 5 = BBR Socket installed; 6 = reserve; 7 = reserve; 8 = reserve; 9 = reserve;
potential Available	xs:int (totalDigits:**1**)	0..1	[LOV-ID 1054] Potential available that after a BBR an upgrooming could be started - so the access speed will may be higher and the quality will not be worse.
reasonOfPotential	reasonOfPotential	0..1	Reason of Potential - why is the Current Access Speed lower then the maximum
technology Type	xs:int (totalDigits:**3**)	0..1	[LOV-ID 9025] LOV_TECHNOLOGY_TYPE: Which standard was uesd for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring
lineState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1052] The copper line state.
vectorized	xs:boolean	0..1	true if line is currently vectorized

reasonOfPotential

Element	Type	Occ	Comment

potential	potential	1..n	Description of Potential Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem – impact on stability: BridgeTap -1502: ICA problem – impact on stability: Degraded Contact -1503: ICA problem – impact on speed: Missing Splitter -1504: ICA problem – impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem – impact on stability: External Interference detected -1506: ICA problem – impact on stability: Intermittent contact -1507: ICA problem – impact on stability: Loop unbalanced -1508: ICA problem – impact on stability: Untwisted in-house wiring -1509: ICA problem – impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem – impact on stability: CPE interoperability problem -1511: ICA problem – impact on stability: Black-listed CPE -1517: ICA problem – impact on stability: Abnormal crosstalk -1518: ICA problem – impact on stability: Defect switched power supply -1519: ICA problem – impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current acccess profile +1000: outstanding upgrooming +1100: pending devloc change (short order) +1200: the profile is set manually +1300: Old CPE hardware +1301: CPE hardware doesn’t support Vectoring. +1302: CPE firmware doesn’t support Vectoring Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem – impact on stability: BridgeTap -1502: ICA problem – impact on stability: Degraded Contact -1503:

			ICA problem – impact on speed: Missing Splitter -1504: ICA problem – impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem – impact on stability: External Interference detected -1506: ICA problem – impact on stability: Intermittent contact -1507: ICA problem – impact on stability: Loop unbalanced -1508: ICA problem – impact on stability: Untwisted in-house wiring -1509: ICA problem – impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem – impact on stability: CPE interoperability problem -1511: ICA problem – impact on stability: Black-listed CPE -1517: ICA problem – impact on stability: Abnormal crosstalk -1518: ICA problem – impact on stability: Defect switched power supply -1519: ICA problem – impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current acccess profile +1000: outstanding upgrooming +1100: pending devloc change (short order) +1200: the profile is set manually +1300: Old CPE hardware +1301: CPE hardware doesn't support Vectoring. +1302: CPE firmware doesn't support Vectoring Potential Description

fiberQualifAnswer

<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>qualiResultState</td><td>xs:string (Enumeration: <code>ok</code>, <code>ok_stao</code>, <code>planned</code>, <code>nok</code>)</td><td>1..1</td><td>[LOV-ID: 1053] State of the Qualification Result.</td></tr>
<tr><td>qualiResultDetail</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>result Code</td><td>xs:string (minLength:1, maxLength:4)</td><td>1..1</td><td>Qualification Result Code</td></tr>
<tr><td>result Comment</td><td>xs:string (minLength:1, maxLength:256)</td><td>1..1</td><td>Some additional textual description for the result.</td></tr>
</table>
</td><td>0..n</td><td></td></tr>
<tr><td>endPoint</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>taxRegion</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1504] The tax</td></tr>
</table>
</td><td>0..1</td><td>An end point</td></tr>
</table>

				region part of a start- or end-point (e.g. "62").		(consisting of a DN office and a BB device location).
	accessNet	xs:string (minLength:1, maxLength:5)	0..1	The access net part of a start- or end-point (e.g. "ALL").		
	site	xs:string (maxLength:4)	0..1	Site of the Broad Band Device Location.		
	siteCategory	xs:int (totalDigits:3)	0..1	[LOV-ID: 9008] The site categorization.		
	bbDevice Location	xs:string (minLength:1, maxLength:20)	0..1	The broad band device location. (e.g. "AES")		
address	Element	Type	Occ	Comment	0..1	The address associated with this start point.
	street	xs:string (minLength:1, maxLength:30)	0..1	The street name of an address.		
	houseNr	xs:string (minLength:1, maxLength:12)	0..1	The house number of an address.		
	building	xs:string (minLength:1, maxLength:30)	0..1	The building infomation of an address.		
	zip	xs:int (minInclusive:1000, maxInclusive:999999)	0..1	The zip of an address.		
	city	xs:string (minLength:1, maxLength:25)	0..1	The city of an address.		
	additionalCity	xs:string (minLength:1, maxLength:25)	0..1	The additional city information of an address.		
locationId	xs:int				0..1	A location id
socket	Element	Type	Occ	Comment	0..n	List of sockets
	flatId	xs:string (maxLength:6 false)	0..1	A flat id (e.g. 02.01).		
	flatMemo	xs:string (maxLength:64)	0..1	flatMemo		
	socketId	xs:string (minLength:13, maxLength:19)	1..1	A socket id (e.g. A.123.456.789).		
	cooperationId	xs:string (maxLength:100)	0..1	A cooperation id (e.g. FreeFormText).		
	fiberLineState	xs:int (totalDigits:3)	0..1	State of fiber line. Populated here, if no plug exists, else under plug		
	otoState	xs:int (totalDigits:3)	0..1	The state of the OTO (optical termination outlet). Populated here, if no plug exists, else under plug		
	firstInHouse	xs:boolean	0..1	Is this the first socket in the house?		
	availabilityDate	xs:date	0..1	an availability date		
	plug	plugType	0..n	A list of plugs		
bep	Element	Type	Occ	Comment	0..n	Building Entry Point
	locationId	xs:int	1..1	A location id.		

	bepState	xs:int (totalDigits:3)	0..1	The BEP State (connected, available, planned or not connected)		The BEP State (connected, available, planned or not connected)
	availability	availability	0..1	possible values are: "GK1", "GK2", "GK3", "GK4", "GK5", "GK98", "GK99"		
	inHouseAllowed	xs:boolean	0..1	In house installation allowed		
	firstInHouse	xs:boolean	1..1			
	maxAccessSpeedKbps	xs:int	1..n			
	initialMountingShaftCapacity	xs:string (maxLength:32)	1..1	possible values are: "available", "not available", "not checked"		
	bepBuilder	xs:string (maxLength:8)	0..1	possible values are: "SCS", "KOPA"		
	siteCategory	xs:string (maxLength:32)	0..1	possible values are: "standard", "remote_fan_fibre_spot"		
	events	events	0..1	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"		
	address	addressType	0..1	An (geographical) address entity.		

plugType

Element	Type	Occ	Comment
plugNr	xs:int (totalDigits:**3**)	1..1	A plug number (1..4).
fiberLineState	xs:int (totalDigits:**3**)	0..1	The state for the whole fiber line
otoState	xs:int (totalDigits:**3**)	0..1	The state of the OTO (optical termination outlet)
availabilityDate	xs:date	0..1	
remark	xs:string	0..	a remark

<table>
<tr><td></td><td></td><td>1</td><td></td></tr>
<tr><td>maxAccessSpeed</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr><tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>access profiles</td></tr>
<tr><td>qualifProfile</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>qualifIndex</td><td>xs:long (totalDigits:10)</td><td>0..1</td><td>The index identifying a profile within a qualification response.</td></tr><tr><td>usedAccessSpeed</td><td>speedProfileType</td><td>0..1</td><td>A speed profile type.</td></tr><tr><td>serviceSpeed</td><td>speedProfileType</td><td>1..1</td><td>A speed profile type.</td></tr><tr><td>effectiveSpeed</td><td>duplexSpeedType</td><td>0..1</td><td>The effective speed.</td></tr></table></td><td>0..n</td><td>qualification profiles</td></tr>
<tr><td>jumperAction</td><td>xs:boolean</td><td>0..1</td><td>Ueberfuehrungsrelevant (true/false).</td></tr>
</table>

equippedDateHistory

Element	Type	Occ	Comment
sortNr	xs:int	1..1	Sort number: 1 (nearest) ... 3 (oldest)
changeDate	xs:string (pattern:2[0-9]{3}((-[01][0-9])?)((-[0-3][0-9])?))	1..1	
eventType	xs:int (totalDigits:3)	1..1	[LOV-ID: 1324] LOV_EQUIPPED_DATE_EVENT_TYPE 1=TargetDateChange; 2=ValidityClassException
from	xs:string (maxLength:10)	1..1	If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9]))((-[0-3][0-9])); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98
to	xs:string (maxLength:10)	1..1	If EventType = 1 - TargetDateChange: Then the format is:2[0-9]{3}((-[01][0-9]))((-[0-3][0-9])); If EventType = 2 - ValidityClassException: Then the format is: string max length 5, example: from: GK4 to: GK98
changeReasonId	xs:int	1..1	Example: [1] Technology change; [2] Port shortage; [3] Missing material; [4] Veto major customer;[5] Veto municipality; [6] Management re-priorisation; [7] Acquisition delay; [8] Construction delay; [9] Changed

			in the planning phase; [10] Changed in the construction phase; [11] Changed by cooperation partner
changeReasonDescription	xs:string (maxLength:100)	1..1	

Events

ElementType					Occ	Comment
event	Element	Type	Occ	Comment	1..n	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"
	eventType	xs:string (maxLength:32)	1..1	possible values are: "1 - TargetDateChange", "2 - ValidityClassException", "99 - Reserve"		
	sequenceNumber	xs:int	1..1			
	eventTimeStamp	xs:dateTime	1..1			
	from	xs:string (maxLength:10)	0..1			
	to	xs:string (maxLength:10)	0..1			
	eventReason	xs:string (maxLength:100)	0..1			

Availability

Element	Type	Occ	Comment
availabilityDate	xs:date	0..1	Availability date and target date are synonyms. Customers are able to order the service at this date.
validityClass	xs:string (minLength:1, maxLength:12)	1..1	Validity class and quality class are synonyms. Possible values are: "GK1", "GK2", "GK3", "GK4", "GK5", "GK98", "GK99"
reason	xs:string (minLength:1, maxLength:256)	0..1	

2.3 getQualifHistory

2.3.1 REQUEST: getQualifHistoryRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
orderNr	xs:string (pattern:[1-9]\d{25})	1..1	The order ID.

2.3.2 RESPONSE: getQualifHistoryAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if

			request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
qualifLogId	xs:long (totalDigits:**10**)	1..1	Qualification Log Id
transDateTime	xs:dateTime	1..1	The transition date/time.
orderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	The order ID.
groupId	xs:long (totalDigits:**10**)	0..1	A group Id of a TDM message.
qualifHistoryRequest	qualifHistoryReqDataType	1..1	The qualification request from the history selected time slot
qualifHistoryResponse	qualifHistoryResDataType	1..1	The qualification response from the history

qualifHistoryReqDataType

Element	Type	Occ	Comment
qualifNr	xs:long (totalDigits:**10**)	1..1	The qualification ID.
qualifIndex	xs:long (totalDigits:**10**)	0..1	The index identifying a profile within a qualification response.
fulfillmentTimeSlot	fulfillmentTimeSlot	0..1	
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A

<table>
<tr><td></td><td></td><td></td><td>contract element ID.</td></tr>
<tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>0..n</td><td>[LOV-ID: 0276] The BB type.</td></tr>
<tr><td>dnType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0109] The DN type.</td></tr>
<tr><td>- choice:</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/VN/NSN phone number.</td></tr>
<tr><td>llId</td><td>xs:string (minLength:1, maxLength:13)</td><td>1..1</td><td>The local loop ID.</td></tr>
<tr><td>startPoint</td><td>startPointRequestType</td><td>1..1</td><td>The start point associated with this qualification result. (example: "79,TET,UP,2,1")</td></tr>
<tr><td>address</td><td>subjectAddressType</td><td>1..1</td><td>A subject's postal address.</td></tr>
<tr><td>bindingId</td><td>xs:string (maxLength:15)</td><td>1..1</td><td>The binding id (e.g. AC1.222.333.444).</td></tr>
</table>
</td><td>1..1</td><td></td></tr>
<tr><td>qualifExtRef</td><td>xs:string (minLength:1, maxLength:80)</td><td>0..1</td><td>An external reference (assigned by the ISP) for identification of the qualificatio</td></tr>
</table>

			n request.
customerWishDate	xs:date	0..1	The customer wish date.
synchWithVoice	xs:boolean	0..1	Synchronize with voice.
lineState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1052] The copper line state.
newLoop	xs:boolean	0..1	Qualify for a new loop.
sfSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.
hasOnp	xs:boolean	0..1	Has Operator Number Portabilty
businessType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1301]: Business Type (New, Relocation, Product Change...)
appointment	appointmentType	0..1	An Appointment

fulfillmentTimeSlot

Element	Type	Occ	Comment
fulfillmentTimeSlotQualifIndex	xs:long	1..1	The index identifying a

	(totalDigits:**10**)		profile within a qualification response.
fulfillmentTimeSlotStart	xs:dateTime	1..1	Start Date Time of the Fullfillment Time Slot
fulfillmentTimeSlotEnd	xs:dateTime	0..1	End Date Time of the Fullfillment Time Slot

startPointRequestType

Element	Type	Occ	Comment
upPreparation	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1070] Copper minimal development (1 = Normal, 2 =Copper minimal development, 3...5 = Reserve)
taxRegion	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").
accessNet	xs:string (minLength:**1**, maxLength:**5**)	1..1	The access net part of a start- or end-point (e.g. "ALL").
unitType	xs:int (totalDigits:**3**)	1..1	The type of unit for UP.
unitNumber	xs:int (totalDigits:**6**)	1..1	The number of unit for UP.
sse	xs:int (totalDigits:**2**)	1..1	The 'sse' for UP.
contactType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0115] The type of contact for UP.
contactNr	xs:int (totalDigits:**6**)	0..4	The contact number for UP.

subjectAddressType

Element	Type	Occ	Comment
firstName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's first name.
lastName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's last name.
street	xs:string (minLength:**1**, maxLength:**30**)	0..1	The street name of an address.

houseNr	xs:string (minLength:**1**, maxLength:**12**)	0..1	The house number of an address.
building	xs:string (minLength:**1**, maxLength:**30**)	0..1	The building infomation of an address.
zip	xs:int (minInclusive:**1000**, maxInclusive:**999999**)	0..1	The zip of an address.
city	xs:string (minLength:**1**, maxLength:**25**)	0..1	The city of an address.
additionalCity	xs:string (minLength:**1**, maxLength:**25**)	0..1	The additional city information of an address.

appointmentType

Element	Type	Occ	Comment
appointmentId	xs:long (totalDigits:**10**)	1..1	Appointment ID referencing an existing agreement.
appointmentDateTime	xs:dateTime	1..1	Date and Time of an Appointment
appointmentEndDateTime	xs:dateTime	1..0	End Date and Time of an Appointment

2.3.2.1 qualifHistoryResDataType

Element	Type	Occ	Comment
qualifNr	xs:long (totalDigits:**10**)	0..1	The qualification ID.
dnStnr	xs:string (pattern:**0[1-9]\d{8}**)	0..1	The DN "Stammnummer".
llId	xs:string (minLength:**1**, maxLength:**13**)	0..1	The local loop ID.
serviceProfile	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1010] A speed profile number.
availableServiceProfiles	Element / Type / Occ / Comment nr / xs:int (totalDigits: / 1..n / [LOV-ID: 1010] A speed	0..1	

	3) profile number.		
dnType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0109] The DN type.
endPoint	endPointType	0..1	An end point (consisting of a DN office and a BB device location) and port information.
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).
socketId	xs:string (minLength:**13**, maxLength:**19**)	0..1	
plugNr	xs:int (totalDigits:**3**)	0..1	
messageIdLqs	xs:string (pattern:**[\dA-Z]{3}**)	0..1	An error code where '000' indicates 'OK'.
messageIdQualif	xs:string (pattern:**[\dA-Z]{3}**)	0..1	An error code where '000' indicates 'OK'.
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
cpeInfo	cpeInfo	0..1	Information about the CPE.
nrOfWires	xs:int (totalDigits:2)	0..1	The number of wires (only copper).
technologyType	xs:int (totalDigits:3)	0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was uesd for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring
vectorized	xs:boolean	0..1	true if line is currently vectorized

endPointType

Element	Type	Occ	Comment
siteCategory	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 9008] The site categorization.

bbPortInfo	bbPortInfoType	0..1	Information about the Port in the loop.

bbPortInfoType

Element	Type	Occ	Comment
dslamName	xs:string (maxLength:**30**)	0..1	name of the DSLAM (e.g.: ipc-aar730-s-vd-05)
dslamType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1064]: DSLAM Type.
bbPortNr	xs:string (minLength:**1**, maxLength:**15**)	0..4	Splitter port
bbAdslEmulated	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0401]: ADSL emulated flag.
dslamVectoringCapable	xs:boolean	0..1	true if dslam is vectoring capable

2.4 getSrvStatus

Purpose: Obtain status information on a currently installed product or service.

2.4.1 *REQUEST:* getServiceStatusRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
dnVnNsn	xs:string (pattern:0[1-9]\d{8})	1..1	A DN/VN/NSN phone number.

2.4.2 *RESPONSE:* getServiceStatusResponseType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the

<table>
<tr><td></td><td></td><td></td><td>ISP.</td></tr>
<tr><td>sla</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>sfSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr>
<tr><td>saSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr>
</table></td><td>0..1</td><td></td></tr>
<tr><td>ispId</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>An ISP ID.</td></tr>
<tr><td>ispName</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>The name of the ISP.</td></tr>
<tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td>A DN/VN/NSN phone number.</td></tr>
<tr><td>billingZone</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1503] The billing zone.</td></tr>
<tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0276] The BB type.</td></tr>
<tr><td>endPoint</td><td>endPointBaseType</td><td>0..1</td><td></td></tr>
<tr><td>startPoint</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>taxRegion</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1504] The tax region part of a start- or end-point (e.g. "62").</td></tr>
<tr><td>accessNet</td><td>xs:string (minLength:1, maxLength:5)</td><td>1..1</td><td>The access net part of a start- or end-point (e.g. "ALL").</td></tr>
<tr><td>unitType</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>unitNumber</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>sse</td><td>xs:int</td><td>1..1</td><td></td></tr>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>0..4</td><td>The contact number for UP.</td></tr>
<tr><td>upPreparation</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1070] Copper minimal development (1 = Normal, 2 =Copper minimal development, 3...5 = Reserve)</td></tr>
</table></td><td>0..1</td><td>A start point.</td></tr>
<tr><td>reasonOfPotential</td><td>reasonOfPotentialType</td><td>0..1</td><td>Reason of Potential - why is the Current</td></tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>Access Speed lower then the maximum</td></tr>
<tr><td>bbAccess</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0205] Info used in manual exception handling.</td></tr>
<tr><td>dnType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0109] The DN type.</td></tr>
<tr><td>cableBox</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>boardNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Board Nr.</td></tr>
<tr><td>switchingPlaceNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Switching Place Nr.</td></tr>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>1..4</td><td>The contact number for UP.</td></tr>
<tr><td>coordinateX</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>X coordinate of UP.</td></tr>
<tr><td>coordinateY</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>Y coordinate of UP.</td></tr>
</table></td><td>0..1</td><td>The cable box (aka. "Ueberfuehrungspunkt", "UP").</td></tr>
<tr><td>region</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1501] The region.</td></tr>
<tr><td>nrOfWires</td><td>xs:int (totalDigits:2)</td><td>0..1</td><td>The number of wires (only copper).</td></tr>
<tr><td>accessSpeed</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr>
<tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr>
</table></td><td>0..1</td><td></td></tr>
<tr><td>poolType</td><td>xs:string (minLength:1)</td><td>0..1</td><td>The DHCP Pool-Type (named item) of the subscriber (e.g. "pool2"); the LOV-ID 1007 shows the currently available Pool-Type names.</td></tr>
<tr><td>cpeInfo</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>cpeName</td><td>xs:string (maxLength:100)</td><td>1..1</td><td>CPE (Customer Modem) Name</td></tr>
</table></td><td>0..1</td><td>Information about the CPE.</td></tr>
</table>

	dslamTypeAllowed	dslamTypeAllowed	0..n	DSLAM Type(s) which are supported from the cpe - only current Technolgoie is in focus		
	vectoringCapability	xs:int (totalDigits:3)	0..1	[LOV-ID: 9009] Vectoring Capability (1 = vectoring capable (Ok); 2 = friendly (Ok); 3 = Alien (NOk); 4 - unknown (alien))		
	comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.		
cpeOwner	xs:int (totalDigits:**3**)				0..1	[LOV-ID: 4006] The CPE owner. (aka "modem owner")
sessionType	xs:int (totalDigits:**3**)				0..1	[LOV-ID: 1005] The session type.
interleaveMode	xs:int (totalDigits:**3**)				0..1	[LOV-ID: 1008] The interleave mode.
termination	xs:int (totalDigits:**3**)				0..1	[LOV-ID: 1006] The termination type.
vectorized	xs:boolean				0..1	
technologyType	xs:int (totalDigits:3)				0..1	[LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was uesd for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring
opStatus	xs:int (totalDigits:**3**)				0..1	[LOV-ID: 1014] The OP Status.
Socket	Element	Type	Occ	Comment	0..1	A socket (fiber)
	socketId	xs:string (minLength:**13**, maxLength:**19**)	1..1	A socket id (e.g. A.123.456.789).		
	cooperationId	xs:string (maxLength:**100**)	0..1	A cooperation id (e.g. FreeFormText).		
	plug	plugSmallType	1..n	A list of plugs		
Service	Element	Type	Occ	Comment	0..n	The service part of a service status
	contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.		

	sla	sla	0..1			response.
	speedProfile	speedProfileType	0..1	The speed profile.		
	speedProfileReq	speedProfileType	0..1	A speed profile type.		
	effectiveSpeed	duplexSpeedType	0..1	The effective speed.		
	bbQuality	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1009] The BB quality.		
	classOfService	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1108] The Class of Service.		
	fairUseSpeedProfileNr	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").		
	extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.		

endPointType

Element	Type	Occ	Comment
siteCategory	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 9008] The site categorization.
bbPortInfo	bbPortInfoType	0..1	Information about the Port in the loop.

bbPortInfoType

Element	Type	Occ	Comment
dslamName	xs:string (maxLength:**30**)	0..1	name of the DSLAM (e.g.: ipc-aar730-s-vd-05)
dslamType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1064]: DSLAM Type.
bbPortNr	xs:string (minLength:**1**, maxLength:**15**)	0..4	Splitter port
bbAdslEmulated	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0401]: ADSL emulated flag.
dslamVectoringCapable	xs:boolean	0..1	true if dslam is vectoring capable

2.5 createCustomerOrder

Purpose: Place a new customer order.

2.5.1 *REQUEST:* customerOrderRequestType

<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>customer OrderNr</td><td>xs:string (pattern:[1-9]\d{25})</td><td>0..1</td><td>The customer order ID.</td></tr>
<tr><td>orderGroupNr</td><td>xs:long (totalDigits:12)</td><td>0..1</td><td>The order group ID.</td></tr>
<tr><td>wosId</td><td>xs:string (maxLength:17)</td><td>0..1</td><td>The work order synchronisation ID.</td></tr>
<tr><td>qualification</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>qualifNr</td><td>xs:long (totalDigits:10)</td><td>1..1</td><td>The qualification ID.</td></tr>
<tr><td>qualifIndex</td><td>xs:long (totalDigits:10)</td><td>1..1</td><td>The index identifying a profile within a qualification response.</td></tr>
<tr><td>fulfillmentTimeSlotQualifIndex</td><td>xs:long (totalDigits:10)</td><td>0..1</td><td>The index identifying a profile within a qualification response.</td></tr>
</table>
</td><td>0..1</td><td>Required if the base product is not BBCS on TDM (Contract Element 110). The qualification Nr is optional for a base product with Contract Element 110. The qualification Nr must be valid and not expired.</td></tr>
<tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td>A DN/VN/NSN phone number.</td></tr>
<tr><td>creationType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1003] The so-called "kind of creation" of an order.</td></tr>
<tr><td>delivery Notification</td><td>xs:boolean</td><td>0..1</td><td>Notification if x day before</td></tr>
</table>

			planned activation the order isn't ready.
order	***orderRequestType*** Known extension of orderRequestType are: • createType • disconnectType • modifyType • coCreateIntType • ispChangeType • addType • changeType • modifyPendingBaseOrdType • modifyPendingSrvOrdType • reduceType	1..n	A customer order.

2.5.1.1 createType (Extension of orderRequestType)

Part of a customer order. Purpose: Create a BBCS connection as a base for services.

Extension of orderRequestType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.

<table>
<tr><td>appointmentId</td><td>xs:long (totalDigits:10)</td><td>0..1</td><td>Appointment ID referencing an existing agreement.</td></tr>
<tr><td>selfInstall</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 4005] Type of Self Installation.</td></tr>
<tr><td>layer2</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0276] The BB type.</td></tr><tr><td>sessionType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1005] The session type.</td></tr><tr><td>termination</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1006] The termination type.</td></tr><tr><td>poolType</td><td>xs:string (minLength:1)</td><td>0..1</td><td></td></tr></table></td><td>1..1</td><td>A layer2 type with some required elements. Required if SESSION_TYPE is DHCP.</td></tr>
<tr><td>sla</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>sfSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr><tr><td>saSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr></table></td><td>0..1</td><td>Service Level Agreement</td></tr>
<tr><td>processWithLowPriority</td><td>xs:boolean</td><td>0..1</td><td>Process an order with low priority</td></tr>
<tr><td>inhouseInstallationRequest</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>ContactAddress</td><td>contactAddressType</td><td>1..1</td><td>Customer Informati</td></tr><tr><td>InstallationNotice</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>Comment dispatchir service er</td></tr></table></td><td>0..1</td><td>Information needed for a fiber in house installation</td></tr>
</table>

contactAddressType

Element	Type	Occ	Comment
firstName	xs:string (minLength:1, maxLength:30)	0..1	A subject's first name.
lastName	xs:string (minLength:1, maxLength:30)	0..1	A subject's last name.
language	xs:string	0..1	ISO 639-1 (Codes for the

			representation of names of languages) (de = german; fr = french; it = italian)
eMail	xs:string (minLength:**5**, maxLength:**100**)	0..1	An E-Mail address (a.b@x.com)
phone	xs:string (pattern: **(\+)?([0-9]){7,15}**)	0..1	phone number
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	a comment to this address Informations
Element	Type	Occ	Comment

2.5.1.2 disconnectType (Extension of orderRequestType)

Part of a customer order. Purpose: Disconnect all services and the base product.

Extension of: orderRequestType

Element	Type	Occ	Comment
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customers wish date.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
processWithLowPriority	xs:boolean	0..1	Process an order with low priority

2.5.1.3 modifyType (Extension of orderRequestType)

Part of a customer order. Purpose: Modify an installed BBCS base product.

Extension of: orderRequestType

Element	Type	Occ	Comment
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.

<table>
<tr><td>disconDate</td><td>xs:date</td><td>0..1</td><td>The date of service deactivation.</td></tr>
<tr><td>comment</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>A comment.</td></tr>
<tr><td>appointmentId</td><td>xs:long (totalDigits:10)</td><td>0..1</td><td>Appointment ID referencing an existing agreement.</td></tr>
<tr><td>selfInstall</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 4005] Type of Self Installation.</td></tr>
<tr><td>layer2</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0276] The BB type.</td></tr><tr><td>sessionType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1005] The session type.</td></tr><tr><td>termination</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1006] The termination type.</td></tr><tr><td>poolType</td><td>xs:string (minLength:1)</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>Layer2 information. Required if SESSION_TYPE is DHCP.</td></tr>
<tr><td>sla</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>sfSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr><tr><td>saSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr></table></td><td>0..1</td><td>Service Level Agreement</td></tr>
<tr><td>processWithLowPriority</td><td>xs:boolean</td><td>0..1</td><td>Process an order with low priority</td></tr>
</table>

2.5.1.4 coCreateIntType (Extension of orderRequestType)

Part of a customer order. Purpose: Create an onsite installation ticket as part of the customer order. Note: The whole customer order will be aborted if a CO_CREATE_INT detail order is submitted without a preceding order for a BBCS service (within the same customer order).

Extension of: orderRequestType

Element	Type	Occ	Comment
onsiteSupport	xs:int (totalDigits:**3**)	0..1	

<table>
<tr><td>ispItRef</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>An external reference (an ID assigned by the ISP) identifying the installation ticket</td></tr>
<tr><td>endUser</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>name</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td>A name.</td></tr><tr><td>phone</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr><tr><td>comment</td><td>xs:string (minLength:1, maxLength:2048)</td><td>0..1</td><td></td></tr></table></td><td>1..1</td><td>Contact information on the end user (name, phone numbers, etc)</td></tr>
<tr><td>holdFlag</td><td>xs:boolean</td><td>0..1</td><td>If set to true the Installation Ticket is hold until Hardware Delivery Date.</td></tr>
<tr><td>hwDeliveryState</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 4007] Hardware Delivery State.</td></tr>
<tr><td>hwDeliveryDate</td><td>xs:date</td><td>0..1</td><td>Hardware Delivery Date.</td></tr>
<tr><td>hwDeliveryLocation</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>Hardware delivery location</td></tr>
<tr><td>hwType</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>CPE Description</td></tr>
<tr><td>hwExtRefReq</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested</td></tr>
</table>

installDateTimeRange	Element / Type / Occ / Comment from / xs:dateTime / 1..1 to / xs:dateTime / 1..1	0..1	Installation frame.
installationType	xs:string (minLength:**1**, maxLength:**30**)	0..1	Additional installation description.
additionalInstallationReq	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.

2.5.1.5 ispChangeType (Extension of orderRequestType)

Part of a customer order. Purpose: Let a recipient ISP order the take over of a BBCS service currently operated by a donor ISP. Note: The ISP_CHANGE detailorder is not sufficient for completing the ISP change operation. At least 1 SRV_ADD must follow within the context of the same logical customer order.

Extension of: orderRequestType

Element	Type	Occ	Comment
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
selfInstall	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4005] Type of Self Installation.
layer2	Element / Type / Occ / Comment bbType / xs:int / 1..1 / [LOV-ID:	0..1	Layer2

		(totalDigits:**3**)		0276] The BB type.		information. Required if SESSION_TYPE is DHCP.
	sessionType	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1005] The session type.		
	termination	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1006] The termination type.		
	poolType	xs:string (minLength:**1**)	0..1			
sla	ElementType		Occ	Comment		Service Level Agreement
	sfSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0282] The service fulfillment SLA ID.		
	saSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0283] The service level assurance id		
processWithLowPriority	xs:boolean				0..1	Process an order with low priority

2.5.1.6 addType (Extension of orderRequestType)

Part of a customer order. Purpose: Add a service to an existing BBCS connection.

Extension of: orderRequestType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	ElementType / xs:int (totalDigits:**3**) / Occ 0..1 / Comment [LOV-ID: 0282] The service fulfillment SLA ID. (sfSlaId)	0..1	Service Level Agreement

	saSlaId: xs:int (totalDigits:**3**) 0..1 [LOV-ID: 0283] The service level assurance id		
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1108] The Class of Service.

2.5.1.7 changeType (Extension of orderRequestType)

Part of a customer order. Purpose: Modify an existing service.

Extension of: orderRequestType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	Element / Type / Occ / Comment sfSlaId / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 0282] The service fulfillment SLA ID. saSlaId / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 0283] The service level assurance id	0..1	Service Level Agreement
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1108] The

			Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").

2.5.1.8 modifyPendingBaseOrdType (Extension of orderRequestType)

Part of a customer order. Purpose: Modify a pending BBCS base product order.

Extension of: orderRequestType

Element	Type	Occ	Comment
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
selfInstall	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4005] Type of Self Installation.
layer2	Element / Type / Occ / Comment bbType / xs:int (totalDigits:**3**) / 1..1 / [LOV-ID: 0276] The BB type. sessionType / xs:int (totalDigits:**3**) / 1..1 / [LOV-ID: 1005] The session type. termination / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 1006] The termination type. poolType / xs:string (minLength:**1**) / 0..1 /	0..1	Layer2 information. Required if SESSION_TYPE is DHCP.
sla	Element / Type / Occ / Comment sfSlaId / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 0282] The service fulfillment	0..1	Service Level Agreement

				SLA ID.		
	saSlaId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0283] The service level assurance id		

2.5.1.9 modifyPendingSrvOrdType (Extension of orderRequestType)

Part of a customer order. Purpose: Change an existing service related order.

Extension of: orderRequestType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customer wish date.
disconDate	xs:date	0..1	The date of service deactivation.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
speedProfileNrReq	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1010] The requested speed profile number.
sla	Element / Type / Occ / Comment sfSlaId / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 0282] The service fulfillment SLA ID. saSlaId / xs:int (totalDigits:**3**) / 0..1 / [LOV-ID: 0283] The service level assurance id	0..1	Service Level Agreement
processWithLowPriority	xs:boolean	0..1	Process an order with low priority
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
classOfService	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1108] The Class of Service.
fairUseSpeedProfileNr	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1109] The requested fair use

			profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").

2.5.1.10 reduceType (Extension of orderRequestType)

Part of a customer order. Purpose: Remove an installed service.

Extension of: orderRequestType

Element	Type	Occ	Comment
contrEleId	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0320] A contract element ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
customerWishDate	xs:date	0..1	The customers wish date.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
processWithLowPriority	xs:boolean	0..1	Process an order with low priority

2.5.2 RESPONSE: customerOrderAckType

The acknowledge message returned after processing an customer order request.

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**,	0..1	Some additional

	maxLength:**256**)		textual description for the reason.
customerOrderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	The customer order ID.
orderGroupNr	xs:long (totalDigits:**12**)	0..1	The order group ID.
nsn	xs:string (pattern:**010\d{7}**)	0..1	A Net Service Number
orderItem	Element / Type / Occ / Comment success / xs:boolean / 1..1 / The result code for the transaction ("true" if request was successful, "false" otherwise). reason / xs:string (pattern:**[\dA-Z]{3}**) / 0..1 / A 3-letter error code (aka messageId) where "000" means "ok". reasonComment / xs:string (minLength:**1**, maxLength:**256**) / 0..1 / Some additional textual description for the reason. orderNr / xs:string (pattern:**[1-9]\d{25}**) / 0..1 / The order ID.	0..n	The acknowledge message returned after processing an order request.

2.6 getTransactionOverview

Purpose: Create a transaction overview over the various WSG transactions overtime

2.6.1 REQUEST: getTransactionOverviewRequestType

Purpose: List transactions.

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
dnVnNsn	xs:string (pattern:**0[1-9]\d{8}**)	1..1	A DN/VN/NSN phone number.
transType1	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 9001] The type of transition. (1 = WORK_ORDER; 2 = VOICE_MESSAGE; 3 = ACCESS_TICKET; 4 = WORK_TICKET; 5 = ALARM)
Choice	Element / Type / Occ / Comment transDateTimeRange / dateTimeRangeType / 1..1 / A range of transition dates/times.	0..1	

	transDateTime	xs:dateTime	1..1	The transition date/time.		

2.6.2 RESPONSE: getTransactionOverviewAckType

This class represents a response message returned by the getTransactionOverview operation.

<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>success</td><td>xs:boolean</td><td>1..1</td><td>The result code for the transaction ("true" if request was successful, "false" otherwise).</td></tr>
<tr><td>reason</td><td>xs:string (pattern:[\dA-Z]{3})</td><td>0..1</td><td>A 3-letter error code (aka messageId) where "000" means "ok".</td></tr>
<tr><td>reasonComment</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>Some additional textual description for the reason.</td></tr>
<tr><td>transaction</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>transDateTime</td><td>xs:dateTime</td><td>1..1</td><td>Timestamp of last modification. (not null)</td></tr>
<tr><td>userName</td><td>xs:string</td><td>1..1</td><td>The name of the user that performed the last modification. (not null)</td></tr>
<tr><td>transType1</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 9001] The type of transition. (1 = WORK_ORDER; 2 = VOICE_MESSAGE; 3 = ACCESS_TICKET; 4 = WORK_TICKET; 5 = ALARM)</td></tr>
<tr><td>transType2</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 9002] The transaction sub-type LOV. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_TYPE hence transType2=1 means 'ENTERED')</td></tr>
<tr><td>transId</td><td>xs:integer</td><td>1..1</td><td>The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null)</td></tr>
<tr><td>transState</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STA</td></tr>
</table>
</td><td>0..n</td><td>A list of selected transaction records sorted descending by time. This class represents a transaction record documenting any action on a WORK_ORDER, a VOICE_MESSAGE, an ACCESS_TICKET, a WORK_TICKET or an ALARM. Timestamp of last modification. (not null) The name of the user that performed the last modification. (not null) [LOV-ID: 9002] The transaction sub-type LOV. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_TYP</td></tr>
</table>

					E hence transType2=1 means 'ENTERED') The transaction ID. (e.g. if transType1:=WORK_ORDER then transId:=ORDER_ID) (not null) The transaction state. (e.g. if transType1=WORK_ORDER then transType2:=ORDER_STATE hence transType2=2 means 'HOLDING') (not null) The ID of the ISP involved in the transaction. (not null) The name of the ISP involved in the transaction. (not null) The ID of a second ISP involved in the transaction. The name of a second ISP involved in the transaction. The DN/VN/NSN associated to that transaction. (not null) A second DN/VN/NSN associated to that transaction. A transaction response message.

			TE hence transType2=2 means 'HOLDING') (not null)
ispId1	xs:int (totalDigits:**6**)	1..1	The ID of the ISP involved in the transaction. (not null)
ispName1	xs:string (minLength:**1**, maxLength:**30**)	1..1	The name of the ISP involved in the transaction. (not null)
ispId2	xs:int (totalDigits:**6**)	0..1	The ID of a second ISP involved in the transaction.
ispName2	xs:string (minLength:**1**, maxLength:**30**)	0..1	The name of a second ISP involved in the transaction.
dnVnNsn1	xs:string (pattern:**0[1-9]\d{8}**)	1..1	The DN/VN/NSN associated to that transaction. (not null)
dnVnNsn2	xs:string (pattern:**0[1-9]\d{8}**)	0..1	A second DN/VN/NSN associated to that transaction.
response	xs:string	0..1	A transaction response message.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.

2.7 getOrderDetail

Purpose: Lookup an order in the WSG DB

2.7.1 REQUEST: getDetailRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
Choice	Element: orderNr; Type: xs:string (pattern:**[1-9]\d{25}**); Occ: 1..1; Comment: The order ID.	1..1	*Choice*

	customerOrderNr	xs:string (pattern:**[1-9]\d{25}**)	1..1	The customer order ID.		

2.7.2 RESPONSE: getDetailAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
customerOrder	***customerOrderType***	0..1	The generic customer order type. A list of orders extending abstractOrderType (E.g. base or service order).

customerOrderType:

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
ispName	xs:string (minLength:**1**, maxLength:**30**)	1..1	The name of the ISP.
customerOrderNr	xs:string (pattern:**[1-9]\d{25}**)	1..1	The customer order ID.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
dnVnNsn	xs:string (pattern:**0[1-9]\d{8}**)	0..1	A DN/VN/NSN phone number.
creationType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1003] The so-called "kind of creation" of an

			order.
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
qualifNr	xs:long (totalDigits:**10**)	0..1	The qualification ID.
qualifIndex	xs:long (totalDigits:**10**)	0..1	The index identifying a profile within a qualification response.
fulfillmentTimeSlotQualifIndex	xs:long (totalDigits:**10**)	0..1	The index identifying a profile within a qualification response.
billingZone	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1503] The billing zone.
wosId	xs:string (maxLength:**17**)	0..1	The work order synchronisation ID.
wosIdReq	xs:string (maxLength:**17**)	0..1	The requested work order synchronisation ID.
endPoint	endPointType	0..1	An end point (consisting of a DN office

<table>
<tr><td></td><td></td><td></td><td>and a BB device location) and port information.</td></tr>
<tr><td>reasonOfPotential</td><td>reasonOfPotential</td><td>0..1</td><td>Reason of Potential - why is the Current Access Speed lower then the maximum</td></tr>
<tr><td>cpeInfo</td><td>cpeInfo</td><td>0..1</td><td>Information about the CPE.</td></tr>
<tr><td>socket</td><td>socketType</td><td>0..1</td><td>Socket (Fiber) A flat id (e.g. 02.01). State of fiber line. Populated here, if no plug exists, else under plug The state of the OTO (optical termination outlet). Populated here, if no plug exists, else under plug Is this the first socket in the house? A list of plugs</td></tr>
<tr><td>order</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>baseProductOrder</td><td>baseProductOrderType</td><td>0..1</td><td>An order for a base product. In case of BBCS standalone</td></tr></table></td><td></td><td>A list of orders extending abstractOrderType (E.g. base or</td></tr>
</table>

	serviceOrder	serviceOrderType	0..n	An order for a service.	service order).
	ispChangeDonorOrder	ispChangeDonorOrderType	0..1	An isp change donor order that reports the new isp receiver to the isp donor. The ISP ID of the new ISP (receiver). The name of the new ISP (receiver).	
sessionType	xs:int (totalDigits:**3**)				0..1 [LOV-ID: 1005] The session type.
termination	xs:int (totalDigits:**3**)				0..1 [LOV-ID: 1006] The termination type.
vectorized	xs:boolean				0..1
technologyType	xs:int (totalDigits:3)				0..1 [LOV-ID: 9025] LOV_TECHNOLOGY_TYPE: Which standard was uesd for bitrate calculation: 1 = VDSL2; 2 = VDSL Vectoring

baseOrderType

Element	Type	Occ	Comment
creationType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1003] The so-called "kind of creation" of an order.
orderNr	xs:string (pattern:**[1-9]\d{25}**)	1..1	The order ID.
contrEleId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0320] A contract element ID.
orderType	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1001] The order type.
orderState	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1002] The order status.
customerWishDate	xs:date	0..1	The customers wish date.
estimatedDue	xs:dateTime	0..1	The estimated due

DateTimeStart			date and time start.
estimatedDue DateTimeEnd	xs:dateTime	0..1	The estimated due date and time end.
transDateTime	xs:dateTime	1..1	The transition date/time.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
sla	ElementTypeOccComment sfSlaId: xs:int (totalDigits:**3**) 0..1 [LOV-ID: 0282] The service fulfillment SLA ID. saSlaId: xs:int (totalDigits:**3**) 0..1 [LOV-ID: 0283] The service level assurance id	0..1	Service Level Agreement

baseProductOrderType

An order for a base product.

Element	Type	Occ	Comment
disconDate	xs:date	0..1	The date of service deactivation.
bbType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0276] The BB type.
startPoint	Element / Type / Occ / Comment taxRegion: xs:int (totalDigits:**3**) 1..1 [LOV-ID: 1504] The tax region accessNet: xs:string (minLength:**1**, maxLength:**5**) 1..1 The access net part of a start- or end-point (e.g. "ALL"). unitType: xs:int 1..1 unitNumber: xs:int 1..1 sse: xs:int 1..1	0..1	A start point.

<table>
<tr><td></td><td><table>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>0..4</td><td>The contact number for UP.</td></tr>
<tr><td>upPreparation</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1070] Copper minimal</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>bbAccess</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0205] Info used in manual exception handling.</td></tr>
<tr><td>bbPortNr</td><td>xs:string (minLength:1, maxLength:15)</td><td>0..4</td><td>Info used in manual exception handling.</td></tr>
<tr><td>dnType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0109] The DN type.</td></tr>
<tr><td>dnVnNsnReq</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td>The requested DN/VN/NSN.</td></tr>
<tr><td>stnrDdi</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td>The base number ("Stammnummer") for DDI.</td></tr>
<tr><td>cableBox</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>boardNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Board Nr.</td></tr>
<tr><td>switchingPlaceNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Switching Place Nr.</td></tr>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>1..4</td><td>The contact number for UP.</td></tr>
<tr><td>coordinateX</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>X coordinate of UP.</td></tr>
<tr><td>coordinateY</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>Y coordinate of UP.</td></tr>
</table></td><td>0..1</td><td>The cable box (aka. "Ueberfuehrungspunkt", "UP").</td></tr>
<tr><td>region</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1501] The region.</td></tr>
<tr><td>address</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>street</td><td>xs:string</td><td>0..</td><td>The street</td></tr>
</table></td><td>0..</td><td>In case of BBCS</td></tr>
</table>

<table>
<tr><td></td><td><table>
<tr><td></td><td>(minLength:1, maxLength:30)</td><td>1</td><td>name of an address.</td></tr>
<tr><td>houseNr</td><td>xs:string (minLength:1, maxLength:12)</td><td>0..1</td><td>The house number of an address.</td></tr>
<tr><td>building</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>The building infomation of an address.</td></tr>
<tr><td>zip</td><td>xs:int (minInclusive:1000, maxInclusive:999999)</td><td>0..1</td><td>The zip of an address.</td></tr>
<tr><td>city</td><td>xs:string (minLength:1, maxLength:25)</td><td>0..1</td><td>The city of an address.</td></tr>
<tr><td>additionalCity</td><td>xs:string (minLength:1, maxLength:25)</td><td>0..1</td><td>The additional city information of an address.</td></tr>
</table></td><td>1</td><td>standalone</td></tr>
<tr><td>sgMm</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0107] The "Schalt-Merkmal".</td></tr>
<tr><td>nrOfWires</td><td>xs:int (totalDigits:2)</td><td>0..1</td><td>The number of wires (only copper).</td></tr>
<tr><td>accessSpeed</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr>
<tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr>
</table></td><td>0..1</td><td></td></tr>
<tr><td>accessSpeedChange</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1064] The access speed changed.</td></tr>
<tr><td>poolType</td><td>xs:string (minLength:1)</td><td>0..1</td><td>The DHCP Pool-Type (named item) of the subscriber (e.g. "pool2"); the LOV-ID 1007 shows the currently available Pool-Type names.</td></tr>
</table>

cpeOwner	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4006] The CPE owner. (aka "modem owner")
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
appointmentDateTime	xs:dateTime	0..1	Date and Time of an Appointment
selfInstall	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4005] Type of Self Installation.
opStatus	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1014] The OP Status.
inhouseInstallationInfo	nhouseInstallationInfoType	0..1	Information about a fiber in house installation
history	baseProductOrderHistoryType	0..n	An order history for a base product.

baseProductOrderHistoryType:

Element	Type	Occ	Comment
orderState	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1002] The order status.
customerWishDate	xs:date	0..1	The customer wish date.
estimatedDueDateTimeStart	xs:dateTime	0..1	The estimated due date and time start.
estimatedDueDateTimeEnd	xs:dateTime	0..1	The estimated due date and time end.
transDateTime	xs:dateTime	1..1	The transition date/time.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId)

<table>
<tr><td></td><td></td><td></td><td>where "000" means "ok".</td></tr>
<tr><td>reasonComment</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>Some additional textual description for the reason.</td></tr>
<tr><td>extRef</td><td>xs:string (minLength:1, maxLength:80)</td><td>0..1</td><td>An external reference provided by the ISP.</td></tr>
<tr><td>sla</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>sfSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr>
<tr><td>saSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr>
</table></td><td>0..1</td><td>Service Level Agreement</td></tr>
<tr><td>disconDate</td><td>xs:date</td><td>0..1</td><td>The date of service deactivation.</td></tr>
<tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0276] The BB type.</td></tr>
<tr><td>accessSpeed</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr>
<tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr>
</table></td><td>0..1</td><td></td></tr>
<tr><td>accessSpeedChange</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1064] The access speed changed.</td></tr>
<tr><td>poolType</td><td>xs:string (minLength:1)</td><td>0..1</td><td>The DHCP Pool-Type (named item) of the subscriber (e.g. "pool2"); the LOV-ID 1007 shows the</td></tr>
</table>

			currently available Pool-Type names.
cpeOwner	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4006] The CPE owner. (aka "modem owner")

serviceOrderType (Extension of: baseOrderType)

An order for a service.

<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>speedProfile</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int</td><td>1..1</td><td>[LOV-ID: 1010]</td></tr><tr><td>description</td><td>xs:string</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>The speed profile.</td></tr>
<tr><td>speedProfileReq</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int</td><td>1..1</td><td>[LOV-ID: 1010]</td></tr><tr><td>description</td><td>xs:string</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>A speed profile type.</td></tr>
<tr><td>accessSpeed</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int</td><td>1..1</td><td>[LOV-ID: 1010]</td></tr><tr><td>description</td><td>xs:string</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td></td></tr>
<tr><td>accessSpeedChange</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1064] The access speed changed.</td></tr>
<tr><td>effectiveSpeed</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>up</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>A speed in kbit/sec.</td></tr><tr><td>down</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>A speed in kbit/sec.</td></tr></table></td><td>0..1</td><td>The effective speed.</td></tr>
<tr><td>bbQuality</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1009] The BB quality.</td></tr>
<tr><td>classOfService</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1108] The Class of Service.</td></tr>
<tr><td>fairUseSpeedProfileNr</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1109] The requested fair use profile Nr (e.g. 0 := "Restore original Service Speed Profile" 1, := "600 down / 100 up").</td></tr>
</table>

history	***serviceOrderHistoryType***	0..n	An order for a service.

serviceOrderHistoryType:

Element	Type	Occ	Comment
orderState	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1002] The order status.
customerWishDate	xs:date	0..1	The customer wish date.
estimatedDueDateTimeStart	xs:dateTime	0..1	The estimated due date and time start.
estimatedDueDateTimeEnd	xs:dateTime	0..1	The estimated due date and time end.
transDateTime	xs:dateTime	1..1	The transition date/time.
Comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
sla	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>sfSlaId</td><td>xs:int (totalDigits:**3**)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr><tr><td>saSlaId</td><td>xs:int (totalDigits:**3**)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr></table>	0..1	Service Level Agreement
speedProfile	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr></table>	0..1	The speed

	speedProfileNr: xs:int, 1..1, [LOV-ID: 1010] description: xs:string, 0..1		profile.
speedProfileReq	Element: speedProfileNr, Type: xs:int, Occ: 1..1, Comment: [LOV-ID: 1010] Element: description, Type: xs:string, Occ: 0..1	0..1	A speed profile type.
effectiveSpeed	Element: up, Type: xs:int (totalDigits:**6**), Occ: 1..1, Comment: A speed in kbit/sec. Element: down, Type: xs:int (totalDigits:**6**), Occ: 1..1, Comment: A speed in kbit/sec.	0..1	The effective speed.
bbQuality	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1009] The BB quality.

ispChangeDonorOrderType (Extension of: baseOrderType)

Element	Type	Occ	Comment
orderState	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1002] The order status.
customerWishDate	xs:date	0..1	The customer wish date.
estimatedDueDateTimeStart	xs:dateTime	0..1	The estimated due date and time start.
estimatedDueDateTimeEnd	xs:dateTime	0..1	The estimated due date and time end.
transDateTime	xs:dateTime	1..1	The transition date/time.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for

			the reason.
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
sla	ElementType / Occ / Comment sfSlaId — xs:int (totalDigits:**3**) — 0..1 — [LOV-ID: 0282] The service fulfillment SLA ID. saSlaId — xs:int (totalDigits:**3**) — 0..1 — [LOV-ID: 0283] The service level assurance id	0..1	Service Level Agreement

inhouseInstallationInfoType

Element	Type	Occ	Comment
ContactAddress	contactAddressType	1..1	Customer Contact Information
InstallationNotice	xs:string (minLength:**1**, maxLength:**256**)	0..1	Comment for dispatching and service engineer
inhouseAppointment	inhouseAppointmentType	0..1	An inhouse Appointment
outOfSla	xs:boolean	0..1	
outOfSlaReason	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 5009] LOV_COPA_OUTOFSLA_REASON (10 = Appointment outside of SLA due to customer preference; 20 = Appointment outside of SLA caused by Installation Partner Swisscom; 30 = Appointment outside of SLA caused by Installation Partner KoPa)
outOfSlaComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Notice text with the reason for Out of SLA

subjectAddressType

Element	Type	Occ	Comment
firstName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's first name.
lastName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's last name.
language	xs:string	0..1	ISO 639-1 (Codes for the representation of names of languages) (de = german; fr = french; it = italian)
eMail	xs:string (minLength:**5**, maxLength:**100**)	0..1	An E-Mail address (a.b@x.com)
phone	xs:string (pattern:**0[1-9]\d{8}**)	0..1	phone number
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	a comment to this address Informations

inhouseInstallationInfoType

Element	Type	Occ	Comment
ContactAddress	contactAddressType	1..1	Customer Contact Information
InstallationNotice	xs:string (minLength:1, maxLength:256)	0..1	Comment for dispatching and service engineer
inhouseAppointment	inhouseAppointmentType	0..1	An inhouse Appointment
outOfSla	xs:boolean	0..1	
outOfSlaReason	xs:int (totalDigits:3)	0..1	[LOV-ID: 5009] LOV_COPA_OUTOFSLA_REASON (10 = Appointment outside of SLA due to customer preference; 20 = Appointment outside of SLA caused by Installation Partner Swisscom; 30 = Appointment outside of SLA caused by Installation Partner KoPa)

outOfSlaComment	xs:string (minLength:1, maxLength:256)	0..1	Notice text with the reason for Out of SLA

reasonOfPotential

Element	Type	Occ	Comment
potential	potential	1..n	Description of Potential Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem – impact on stability: BridgeTap -1502: ICA problem – impact on stability: Degraded Contact -1503: ICA problem – impact on speed: Missing Splitter -1504: ICA problem – impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem – impact on stability: External Interference detected -1506: ICA problem – impact on stability: Intermittent contact -1507: ICA problem – impact on stability: Loop unbalanced -1508: ICA problem – impact on stability: Untwisted in-house wiring -1509: ICA problem – impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem – impact on stability: CPE interoperability problem -1511: ICA problem – impact on stability: Black-listed CPE -1517: ICA problem – impact on stability: Abnormal crosstalk -1518: ICA problem – impact on stability: Defect switched power supply -1519: ICA problem – impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current acccess profile +1000: outstanding upgrooming +1100: pending devloc change (short order) +1200: the profile is set manually +1300: Old CPE hardware +1301: CPE hardware doesn’t support Vectoring. +1302: CPE firmware doesn’t support Vectoring Potential Code negative value: reason why the maximum speed is lower then the current access profile. -1000: Pending

			downgrooming without service impact -1001: Pending downgrooming with service impact -1100: Pending devloc change (lengthing order) -1200: The profile is set manually -1300: -1400: The access is unstable -1501: ICA problem – impact on stability: BridgeTap -1502: ICA problem – impact on stability: Degraded Contact -1503: ICA problem – impact on speed: Missing Splitter -1504: ICA problem – impact on stability: Missing Splitter on alarm system (Business Decision) -1505: ICA problem – impact on stability: External Interference detected -1506: ICA problem – impact on stability: Intermittent contact -1507: ICA problem – impact on stability: Loop unbalanced -1508: ICA problem – impact on stability: Untwisted in-house wiring -1509: ICA problem – impact on stability: Time varying noise (crosstalk and RFI) -1510: ICA problem – impact on stability: CPE interoperability problem -1511: ICA problem – impact on stability: Black-listed CPE -1517: ICA problem – impact on stability: Abnormal crosstalk -1518: ICA problem – impact on stability: Defect switched power supply -1519: ICA problem – impact on speed: BridgeTap on overhead line -1600: Stability reached with downgrade positive value: reason why the maximum speed is higher then the current acccess profile +1000: outstanding upgrooming +1100: pending devloc change (short order) +1200: the profile is set manually +1300: Old CPE hardware +1301: CPE hardware doesn’t support Vectoring. +1302: CPE firmware doesn’t support Vectoring Potential Description

cpeInfo

Element	Type	Occ	Comment
cpeName	xs:string (maxLength:**100**)	1..1	CPE (Customer Modem) Name
dslamTypeAllowed	dslamTypeAllowed	0..n	DSLAM Type(s) which are supported from the cpe - only current Technolgoie is in

			focus
vectoringCapability	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 9009] Vectoring Capability (1 = vectoring capable (Ok); 2 = friendly (Ok); 3 = Alien (NOk); 4 - unknown (alien))
vectoringCapableHardware	xs:boolean	0..1	Does this CPE Hardware support Vectoring?
vectoringCapableFirmware	xs:boolean	0..1	Does this CPE Firmware support Vectoring?
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.

dslamTypeAllowed

Element	Type	Occ	Comment
technology	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 999245] The technology
dslamType	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 1064]: DSLAM Type.

socketType

Element	Type	Occ	Comment
flatId	xs:string (maxLength:**6 false**)	0..1	A flat id (e.g. 02.01).
flatMemo	xs:string (maxLength:**64**)	0..1	
socketId	xs:string (minLength:**13**, maxLength:**19**)	1..1	

cooperationId	xs:string (maxLength:**100**)	0..1	A cooperation id (e.g. FreeFormText).
fiberLineState	xs:int (totalDigits:**3**)	0..1	State of fiber line. Populated here, if no plug exists, else under plug
otoState	xs:int (totalDigits:**3**)	0..1	The state of the OTO (optical termination outlet). Populated here, if no plug exists, else under plug
firstInHouse	xs:boolean	0..1	Is this the first socket in the house?
availabilityDate	xs:date	0..1	an availability date
plug	plugType	0..n	A list of plugs

plugType

Element	Type	Occ	Comment
plugNr	xs:int (totalDigits:**3**)	1..1	A plug number (1..4).
fiberLineState	xs:int (totalDigits:**3**)	0..1	The state for the whole fiber line
otoState	xs:int (totalDigits:**3**)	0..1	The state of the OTO (optical termination outlet)
availabilityDate	xs:date	0..1	
remark	xs:string	0..1	a remark
isActive	xs:boolean	0..1	true if a serice is active on this line
maxAccessSpeed	speedProfileType	0..1	access profiles
qualifProfile	fiberQualifProfileType	0..n	qualification profiles
jumperAction	xs:boolean	0..1	Ueberfuehrungsrelevant (true/false).
fulfillmentTimeSlot	fulfillmentTimeSlot	0..n	A list of fulfillment time slots

fiberQualifProfileType

Element	Type	Occ	Comment
qualifIndex	xs:long (totalDigits:**10**)	0..1	The index identifying a profile within a qualification response.

usedAccessSpeed	speedProfileType	0..1	A speed profile type.
serviceSpeed	speedProfileType	1..1	A speed profile type.
effectiveSpeed	duplexSpeedType	0..1	The effective speed.

speedProfileType

Element	Type	Occ	Comment
speedProfileNr	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 1010] A speed profile number.
description	xs:string (minLength:**1**, maxLength:**60**)	0..1	
max	duplexSpeedType	0..1	A upstream/downstream speed pair. Upload speed in kbit/sec. Download speed in kbit/sec.
min	duplexSpeedType	0..1	A upstream/downstream speed pair. Upload speed in kbit/sec. Download speed in kbit/se

duplexSpeedType

Element	Type	Occ	Comment
up	xs:int (totalDigits:**8**)	1..1	Upload speed in kbit/sec.
down	xs:int (totalDigits:**8**)	1..1	Download speed in kbit/sec.

2.8 getInstallationTicketDetail

Purpose: Lookup an installation ticket in the WSG DB

2.8.1 REQUEST: getInstallationTicketDetailRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
itIdWsg	xs:decimal (totalDigits:**10**)	1..1	Installation ticket id assigned by WSG

2.8.2 RESPONSE: getInstallationTicketDetailAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction

			("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason
ticket	***ticket***	0..1	An installation ticket and its details. [LOV-ID: 4003] Onsite support. "None" is not allowed. Required if contrEleId is missing. WSG order number. This order number identifies the service creation order to which the installation ticket belongs. Required if itIdWsgRef and dnVnNsn is missing DN, VN or NSN. Required if refOrderNr and itIdWsgRef is missing A history entry of the ticket

ticket:

Element	Type	Occ	Comment
onsiteSupport	xs:int (totalDigits:**3**)	0..1	
ispItRef	xs:string (minLength:**1**, maxLength:**30**)	0..1	An external reference (an ID assigned by the ISP) identifying the installation ticket
endUser	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>name</td><td>xs:string (minLength:**1**, maxLength:**60**)</td><td>0..1</td><td>A name.</td></tr><tr><td>phone</td><td>xs:string (pattern:**0[1-9]\d{8}**)</td><td>1..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr><tr><td>comment</td><td>xs:string (minLength:**1**, maxLength:**2048**)</td><td>0..1</td><td></td></tr></table>	1..1	Contact information on the end user (name, phone numbers, etc)
holdFlag	xs:boolean	0..1	If set to true the Installation Ticket is hold

			until Hardware Delivery Date.
hwDeliveryState	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 4007] Hardware Delivery State.
hwDeliveryDate	xs:date	0..1	Hardware Delivery Date.
hwDeliveryLocation	xs:string (minLength:**1**, maxLength:**128**)	0..1	Hardware delivery location
hwType	xs:string (minLength:**1**, maxLength:**128**)	0..1	CPE Description
hwExtRefReq	xs:string (minLength:**1**, maxLength:**128**)	0..1	Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDate TimeRange	Element / Type / Occ from / xs:dateTime / 1..1 to / xs:dateTime / 1..1	0..1	Installation frame.
installationType	xs:string (minLength:**1**, maxLength:**30**)	0..1	Additional installation description.
additional InstallationReq	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
itIdWsg	xs:decimal (totalDigits:**10**)	1..1	Installation ticket id assigned by WSG
itIdSys	xs:string (maxLength:**30**)	0..1	IT system generated number identifying the installation ticket.
refOrderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
ispName	xs:string (minLength:**1**, maxLength:**30**)	1..1	The name of the ISP.
orderType	xs:int (totalDigits:**3**)	0..	[LOV-ID: 1001] The

		1	order type.
dnVnNsn	xs:string (pattern:**0[1-9]\d{8}**)	0..1	
dnVnNsnReq	xs:string (pattern:**0[1-9]\d{8}**)	0..1	The requested DN/VN/NSN.
entryDateTime	xs:dateTime	0..1	The entry dateTime.
closedDateTime	xs:dateTime	0..1	The date and time when the ticked has been closed.
contrEleId	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0320] A contract element ID.
bbType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0276] The BB type.
itIdWsgRef	xs:decimal (totalDigits:**10**)	0..1	Reference to installation ticket (2nd intervention)
dnType	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0109] The DN type.
speedProfileNr	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 1010] The speed profile number.
hwExtRefInst	xs:string (minLength:**1**, maxLength:**128**)	0..1	CPE SAP Order-Number of equipment installed. Semicolon separate list with Number,Counter pairs. E.g. 5555.676.6,02;555.600.6,01 for 2 CPEs of Order-Number 555.676.6 and 1 CPE of Order-Number 555.600.6
additionalInstallationSupport	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>additionalInstallationReq</td><td>xs:int (totalDigits:**3**)</td><td>1..1</td><td>[LOV-ID: 4004] The requested additional installation support.</td></tr><tr><td>aiState</td><td>xs:int (totalDigits:**3**)</td><td>1..1</td><td>[LOV-ID: --] The additional installation support</td></tr></table>	0..n	The additional installation support with it's state.

	state.		
fieldForceComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	An information from the field force.
wosId	xs:string (maxLength:**17**)	0..1	The work order synchronisation ID.
itState	xs:int	1..1	[LOV-ID: 4001] The WSG state of an installation ticket: 1=ENTERED; 2=REJECTED; 3=CHECKED; 4=PROCESSING; 5=INWORK; 6=CLOSED; 7=CANCELLED).
lastModifiedDateTime	xs:dateTime	1..1	The last modification date and time of the corresponding entity.
lastModifiedUsername	xs:string (minLength:**1**, maxLength:**60**)	1..1	The username of the modifying user.
responseComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Text if it is necessary to give some additional detail information. Remark: same attribute as MESSAGE_TEXT in previous .vmg record definitions.
responseCommentCode	xs:int (totalDigits:**3**)	0..1	The response comment code. Code of correction action taken. (LOV).
progressComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	An information about progess
progressCommentCode	xs:int (totalDigits:**3**)	0..1	[LOV-ID: --] The code of the progress information.
progressDateTime	xs:dateTime	0..1	The date and time of the progress
billingInformation	Element: billingAction; Type: xs:int (totalDigits:**3**); Occ: 1..1; Comment: [LOV-ID: 1502] Billing actions.	0..1	Billing relevant informations.

<table>
<tr><td></td><td>
<table>
<tr><td>matCost</td><td>xs:decimal (totalDigits:10)</td><td>0..1</td><td>Total material costs in CHF. (example: '12.25'; pattern: '10d.2d')</td></tr>
<tr><td>ppId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>Flat rate code in CHF. (E.g. 7 = xxx CHF)</td></tr>
<tr><td>ppCount</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>Number of flat rates per TT. (Generally 1)</td></tr>
<tr><td>stdId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>Expense ratio code. (E.g. 01=140 CHF, 02=120 CHF)</td></tr>
<tr><td>expense</td><td>xs:int (totalDigits:5)</td><td>0..1</td><td>Work expense in minutes. (Conversion into hours and multiply with STD_ID rate not done)</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>historyItem</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>itState</td><td>xs:int</td><td>1..1</td><td>[LOV-ID: 4001] The WSG state of an installation ticket: 1=ENTERED; 2=REJECTED; 3=CHECKED; 4=PROCESSING; 5=INWORK; 6=CLOSED; 7=CANCELLED).</td></tr>
<tr><td>lastModifiedDateTime</td><td>xs:dateTime</td><td>1..1</td><td>The last modification date and time of the corresponding entity.</td></tr>
<tr><td>lastModifiedUsername</td><td>xs:string (minLength:1, maxLength:60)</td><td>1..1</td><td>The username of the modifying user.</td></tr>
<tr><td>responseComment</td><td>xs:string (minLength:1, maxLength:256)</td><td>0..1</td><td>Text if it is necessary to give some additional detail information. Remark: same attribute as MESSAGE_TEXT in previous</td></tr>
</table>
</td><td>0..n</td><td>A history entry of the ticket</td></tr>
</table>

			.vmg record definitions.	
response CommentCode	xs:int (totalDigits:**3**)	0..1	The response comment code. Code of correction action taken. (LOV).	
progress Comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	An information about progess	
progress Comment Code	xs:int (totalDigits:**3**)	0..1	[LOV-ID: --] The code of the progress information.	
progress DateTime	xs:dateTime	0..1	The date and time of the progress	
billing Information	billingInformation	0..1	Billing relevant informations.	
install DateTime Range	dateTime RangeType	0..1	Installation frame.	

2.9 getTdmMsgDetail

Purpose: Lookup a (APV) voice message in the WSG DB

2.9.1 REQUEST: getTdmMessageDetailRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
logId	xs:long	1..1	A log ID of a TDM message

2.9.2 RESPONSE: getTdmMessageDetailAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
tdmMessage	tdmMessage	0..1	TDM message (step).

tdmMessage:

Element	Type	Occ	Comment
tdmMessageType	xs:string (minLength:**1**, maxLength:**40**)	1..1	[LOV-ID: 1201] A voice message type. (e.g. 4:="GV04")
tdmMessageRef	xs:string (minLength:**1**, maxLength:**40**)	1..1	Reference from TERCO or other TDM application.
dnVn1	xs:string (pattern:**0[1-9]\d{8}**)	1..1	
dnVn2	xs:string (pattern:**0[1-9]\d{8}**)	0..1	
responseComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Text if it is necessary to give some additional detail information. (free Text)
transDateTime	xs:dateTime	0..1	
processFlowNr	xs:string (minLength:**1**, maxLength:**20**)	1..1	Reference from OMS or other Voice application.
validActiDateTime	xs:dateTime	0..1	
actiDateTime	xs:dateTime	0..1	
validDisconDateTime	xs:dateTime	0..1	
disconDateTime	xs:dateTime	0..1	
dnTypeOld	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0109] The dn type.
dnTypeNew	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0109] The dn type.
bbAccess	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0205] Info used in manual exception handling.
bbTypeOld	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 0276] The Broadband type.

<table>
<tr><td>bbTypeNew</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0276] The Broadband type.</td></tr>
<tr><td>llId</td><td>xs:string (minLength:1, maxLength:13)</td><td>0..1</td><td>The local loop ID.</td></tr>
<tr><td>sessionTypeOld</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1005] Broadband Session Type.</td></tr>
<tr><td>sessionTypeNew</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1005] Broadband Session Type.</td></tr>
<tr><td>backMessageText</td><td>xs:string (minLength:1, maxLength:80)</td><td>0..1</td><td>Free text if it is necessary to give some additional detail information (e.g. port shortage).</td></tr>
<tr><td>cableBox</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>boardNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Board Nr.</td></tr>
<tr><td>switchingPlaceNr</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>UP Switching Place Nr.</td></tr>
<tr><td>contactType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 0115] The type of contact for UP.</td></tr>
<tr><td>contactNr</td><td>xs:int (totalDigits:6)</td><td>1..4</td><td>The contac number for UP.</td></tr>
<tr><td>coordinateX</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>X coordinat of UP.</td></tr>
<tr><td>coordinateY</td><td>xs:int (totalDigits:6)</td><td>0..1</td><td>Y coordinat of UP.</td></tr>
</table></td><td>0..1</td><td>The cable box (aka. "Ueberfuehrungspunkt", "UP").</td></tr>
<tr><td>bbOkStatus</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1004] BB OK status.</td></tr>
<tr><td>custBusinessNr</td><td>xs:string (maxLength:12)</td><td>1..1</td><td>The customer business number.</td></tr>
<tr><td>groupState</td><td>xs:int</td><td>1..1</td><td>[LOV-ID: 1202] The state of the tdm message group:
1=OPEN;
2=DELAYED;
3=DONE)</td></tr>
</table>

<table>
<tr><td>previousGroupState</td><td>xs:int</td><td>0..1</td><td>[LOV-ID: 1203] TDM message previous state.</td></tr>
<tr><td>groupType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1204] TDM message group type Remark: this type can change until the "tdm message group" has reached the state DONE.</td></tr>
<tr><td>sla</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>sfSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0282] The service fulfillment SLA ID.</td></tr><tr><td>saSlaId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0283] The service level assurance id</td></tr></table></td><td>0..1</td><td></td></tr>
<tr><td>bbQualityOld</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1009] The bbQuality.</td></tr>
<tr><td>bbQualityNew</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 1009] The bbQuality.</td></tr>
<tr><td>speedProfileOld</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr><tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>Old service speed profile</td></tr>
<tr><td>speedProfileNew</td><td><table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>speedProfileNr</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 1010] A speed profile number.</td></tr><tr><td>description</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td></td></tr></table></td><td>0..1</td><td>New service speed profile</td></tr>
<tr><td>contrEleId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 0320] A contract element ID.</td></tr>
</table>

2.10 getOrderGroupNr

Purpose: *Fetch a new ORDER_GROUP_NR from the WSG DB.*

2.10.1 REQUEST: getOrderGroupNrRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.

2.10.2 RESPONSE: customerOrderAckType customerOrderAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
customerOrderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	The customer order ID.
orderGroupNr	xs:long (totalDigits:**12**)	0..1	The order group ID.
nsn	xs:string (pattern:**010\d{7}**)	0..1	A Net Service Number
orderItem	Element / Type / Occ / Comment success / xs:boolean / 1..1 / The result code for the transaction ("true" if request was successful, "false" otherwise). reason / xs:string (pattern:**[\dA-Z]{3}**) / 0..1 / A 3-letter error code (aka messageId) where "000" means "ok". reasonComment / xs:string / 0..1 / Some additional	0..n	The acknowledge message returned after processing an order request.

		(minLength:**1**, maxLength:**256**)		textual description for the reason.		
	orderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	The order ID.		

2.11 cancelPendingOrder

Purpose: Cancel a pending customer order or order.

2.11.1 REQUEST: cancelPendingRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
orderNr	xs:string (pattern:**[1-9]\d{25}**)	1..1	The order ID.
comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.

2.11.2 RESPONSE: cancelPendingAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.

2.12 createInstallationTicket

Purpose: Create an Installation Ticket

2.12.1 REQUEST: createInstallationTicketRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
refOrderNr	xs:string (pattern:**[1-9]\d{25}**)	0..1	
contrEleId	xs:int (totalDigits:**3**)	0..1	
itIdWsgRef	xs:decimal (totalDigits:**10**)	0..1	
bbType	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 0276] The

<table>
<tr><td></td><td></td><td></td><td>BB type.</td></tr>
<tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td></td></tr>
<tr><td>custBusinessNr</td><td>xs:string (maxLength:12)</td><td>0..1</td><td>The customer business number.</td></tr>
<tr><td>onsiteSupport</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td></td></tr>
<tr><td>ispItRef</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>An external reference (an ID assigned by the ISP) identifying the installation ticket</td></tr>
<tr><td>endUser</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>name</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td>A name.</td></tr>
<tr><td>phone</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr>
<tr><td>comment</td><td>xs:string (minLength:1, maxLength:2048)</td><td>0..1</td><td></td></tr>
</table></td><td>1..1</td><td>Contact information on the end user (name, phone numbers, etc)</td></tr>
<tr><td>holdFlag</td><td>xs:boolean</td><td>0..1</td><td>If set to true the Installation Ticket is hold until Hardware Delivery Date.</td></tr>
<tr><td>hwDeliveryState</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 4007] Hardware Delivery State.</td></tr>
<tr><td>hwDeliveryDate</td><td>xs:date</td><td>0..1</td><td>Hardware Delivery Date.</td></tr>
<tr><td>hwDeliveryLocation</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>Hardware delivery location</td></tr>
<tr><td>hwType</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>CPE Description</td></tr>
<tr><td>hwExtRefReq</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>Additional Information if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment</td></tr>
</table>

			requested
installDate TimeRange	Element / Type / Occ / Comment from / xs:dateTime / 1..1 to / xs:dateTime / 1..1	0..1	Installation frame.
installationType	xs:string (minLength:**1**, maxLength:**30**)	0..1	Additional installation description.
additional InstallationReq	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
wosId	xs:string (maxLength:**17**)	0..1	The work order synchronisation ID.

2.12.2 RESPONSE: createInstallationTicketAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
itIdWsg	xs:decimal (totalDigits:**10**)	0..1	Installation ticket id assigned by WSG

2.13 modifyPendingInstallationTicket

Purpose: *Modify a pending Installation Ticket*

2.13.1 REQUEST: modifyPendingInstallationTicketRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
itIdWsg	xs:decimal (totalDigits:**10**)	1..1	Installation ticket id

<table>
<tr><td></td><td></td><td></td><td>assigned by WSG</td></tr>
<tr><td>itIdWsgRef</td><td>xs:decimal (totalDigits:10)</td><td>0..1</td><td>Reference to installation ticket (2nd intervention)</td></tr>
<tr><td>refOrderNr</td><td>xs:string (pattern:[1-9]\d{25})</td><td>0..1</td><td></td></tr>
<tr><td>contrEleId</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td></td></tr>
<tr><td>bbType</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td></td></tr>
<tr><td>dnVnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>0..1</td><td></td></tr>
<tr><td>custBusinessNr</td><td>xs:string (maxLength:12)</td><td>0..1</td><td>The customer business number.</td></tr>
<tr><td>onsiteSupport</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td></td></tr>
<tr><td>ispItRef</td><td>xs:string (minLength:1, maxLength:30)</td><td>0..1</td><td>An external reference (an ID assigned by the ISP) identifying the installation ticket</td></tr>
<tr><td>endUser</td><td><table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>name</td><td>xs:string (minLength:1, maxLength:60)</td><td>0..1</td><td>A name.</td></tr>
<tr><td>phone</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr>
<tr><td>comment</td><td>xs:string (minLength:1, maxLength:2048)</td><td>0..1</td><td></td></tr>
</table></td><td>1..1</td><td>Contact information on the end user (name, phone numbers, etc)</td></tr>
<tr><td>holdFlag</td><td>xs:boolean</td><td>0..1</td><td>If set to true the Installation Ticket is hold until Hardware Delivery Date.</td></tr>
<tr><td>hwDeliveryState</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 4007] Hardware Delivery State.</td></tr>
<tr><td>hwDeliveryDate</td><td>xs:date</td><td>0..1</td><td>Hardware Delivery Date.</td></tr>
<tr><td>hwDelivery Location</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>Hardware delivery location</td></tr>
<tr><td>hwType</td><td>xs:string (minLength:1, maxLength:128)</td><td>0..1</td><td>CPE Description</td></tr>
<tr><td>hwExtRefReq</td><td>xs:string (minLength:1,</td><td>0..1</td><td>Additional Information</td></tr>
</table>

	maxLength:**128**)		if ONSITE_SUPPORT is not set to 1="None": CPE SAP Order-Number of equipment requested
installDate TimeRange	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>from</td><td>xs:dateTime</td><td>1..1</td><td></td></tr><tr><td>to</td><td>xs:dateTime</td><td>1..1</td><td></td></tr></table>	0..1	Installation frame.
installationType	xs:string (minLength:**1**, maxLength:**30**)	0..1	Additional installation description.
additional InstallationReq	xs:int (totalDigits:**3**)	0..n	[LOV-ID: 4004] The requested additional installation support.
appointmentId	xs:long (totalDigits:**10**)	0..1	Appointment ID referencing an existing agreement.
wosId	xs:string (maxLength:**17**)	0..1	The work order synchronisation ID.

2.13.2 RESPONSE: modifyPendingInstallationTicketAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.

2.14 cancelPendingInstallationTicket

Purpose: *Cancel a pending Installation Ticket*

2.14.1 REQUEST: cancelPendingInstallationTicketRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
itIdWsg	xs:decimal (totalDigits:**10**)	1..1	Installation ticket id assigned by WSG

comment	xs:string (minLength:**1**, maxLength:**256**)	0..1	A comment.

2.14.2 RESPONSE: cancelPendingInstallationTicketAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.

2.15 getBusinessLines

Purpose: Get a report for all business lines related to a DDI number

2.15.1 REQUEST: getBusinessLinesRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
stnrDdi	xs:string (pattern:**0[1-9]\d{8}**)	1..1	The base number ("Stammnummer") for DDI.

2.15.2 RESPONSE: getBusinessLinesAckType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.

stnr	xs:string	0..1	STNR which belongs to the PABX.
vnRecord	Element / Type / Occ / Comment vn — xs:string — 1..1 — VN. cableBox — cableBox — 0..1 — The cable box (aka. "Ueberfuehrungspunkt", "UP"). bbAssigned — xs:boolean — 0..1 — BB already assigned: true="Yes", false="No". bbInfo — xs:string (maxLength:**256**) — 0..1 — Additional information.	0..n	A business line identity (VN) (= Verrechnungsnummer) record.

2.16 createChangeTicket

Description: create a Change Ticket

2.16.1 Request createChangeTicketRequestType

Element	Type	Occ	Comment
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
exchangeDate	xs:date	1..1	designated date for the exchange
exchangeType	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 3019] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)
reminderProcess	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
customerContact1	customerContactType	1..1	
customerContact2	customerContactType	0..1	
- ***choice:***	ElementType Occ Comment	1..	

	dnNsn	xs:string (pattern:**0[1-9]\d{8}**)	1..1	A DN/NS phone number.	1	
	dslam	dslam	1..1			

customerContactType

Element	Type	Occ	Comment
greetingCode	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 9011] LOV_GREETING_CODE Anrede (Mr.,Ms., Firm, Unknown ...)
firstName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's first name.
lastName	xs:string (minLength:**1**, maxLength:**30**)	1..1	A subject's last name.
Street	xs:string (minLength:**1**, maxLength:**30**)	0..1	The street name of an address.
houseNr	xs:string (minLength:**1**, maxLength:**12**)	0..1	The house number of an address.
Building	xs:string (minLength:**1**, maxLength:**30**)	0..1	The building infomation of an address.
streetAppendix	xs:string (minLength:**1**, maxLength:**30**)	0..1	An additional street information (for instance: Chalet Sonneblick))
Zip	xs:int (minInclusive:**1000**, maxInclusive:**999999**)	0..1	The zip of an address.
City	xs:string (minLength:**1**, maxLength:**25**)	0..1	The city of an address.
eMail	xs:string (minLength:**5**, maxLength:**100**)	0..1	An email address

mobilePhone	xs:string (pattern: **(\+)?([0-9]){7,15}**)	0..1	Mobile phone number
Language	xs:string	1..1	ISO 639-1 (Codes for the representation of names of languages) (de = german; fr = french; it = italian)
communicationChannel	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 3020] The way the customer should be notified

dslam

Element	Type	Occ	Comment
dslamName	xs:string (maxLength:**20**)	1..1	name of the DSLAM (e.g.: ipc-aar730-s-vd-05)
dslamPort	xs:string (maxLength:**20**)	1..1	DSLAM Port notation (e.g.: 1/1/2/12)

2.16.2 Response createChangeTicketResponseType

Element	Type	Occ	Comment
correlationId	xs:string	optional	A unique ID to correlate request and answer(s) within a (ansynch.) batch process.
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
changeTicketId	xs:decimal (totalDigits:**10**)	0..1	

2.17 modifyPendingChangeTicket

Description: Modifies a still pending Change Ticket

2.17.1 Request modifyPendingChangeTicketRequestType

Element	Type	Occ	Comment
changeTicketId	xs:decimal (totalDigits:**10**)	1..1	Change Ticket ID assigned by WSG
extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
exchangeDate	xs:date	1..1	designated date for the exchange
exchangeType	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 3020] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)
reminderProcess	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 9012] LOV_REMINDER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
customerContact1	customerContactType	1..1	Customer Contact 1
customerContact2	customerContactType	0..1	Customer Contact 2
changeReason	xs:string (minLength:**1**, maxLength:**100**)	0..1	A reason why the ticket should be changed

2.17.2 Response modifyPendingChangeTicketResponseType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
changeTicketId	xs:decimal (totalDigits:**10**)	0..1	Change Ticket ID

			assigned by WSG

2.18 cancelPendingChangeTicket

Description: create a Change Ticket

2.18.1 Request createChangeTicketRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
changeTicketId	xs:decimal (totalDigits:**10**)	1..1	Change Ticket ID assigned by WSG
cancelReason	xs:string (minLength:**1**, maxLength:**100**)	1..1	A reason why the ticket should be cancelled

2.18.2 Response

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.

2.19 getChangeTicketOverview

Description: Cancel a still pending Change Ticket

2.19.1 Request getChangeTicketOverviewRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
changeTicketId	xs:decimal (totalDigits:**10**)	0..1	Change Ticket ID assigned by WSG

extRef	xs:string (minLength:**1**, maxLength:**80**)	0..1	An external reference provided by the ISP.
dnNsnRange	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>from</td><td>xs:string (pattern:**0[1-9]\d{8}**)</td><td>1..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr><tr><td>to</td><td>xs:string (pattern:**0[1-9]\d{8}**)</td><td>0..1</td><td>A nomalized phone number (e.g. "0312223344")</td></tr></table>	0..1	
changeTicketStatus	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 3021 Change Ticket Status
ticketCreationDateTimeRange	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>from</td><td>xs:dateTime</td><td>1..1</td><td></td></tr><tr><td>to</td><td>xs:dateTime</td><td>1..1</td><td></td></tr></table>	0..1	
lastModificationDateTimeRange	<table><tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr><tr><td>from</td><td>xs:dateTime</td><td>1..1</td><td></td></tr><tr><td>to</td><td>xs:dateTime</td><td>1..1</td><td></td></tr></table>	0..1	

2.19.2 Response getChangeTicketOverviewResponseType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reaso	xs:string (minLength:**1**, maxLength:**256**)	0..	Some additional

<table>
<tr><td>nComment</td><td></td><td>1</td><td>textual description for the reason.</td></tr>
<tr><td>list</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>changeTicketId</td><td>xs:decimal (totalDigits: 10)</td><td>0..1</td><td>Change Ticket ID assigned by WSG</td></tr>
<tr><td>changeTicketStatus</td><td>xs:int (totalDigits: 3)</td><td>1..1</td><td>[LOV-ID: 3021 Change Ticket Status</td></tr>
<tr><td>statusReason</td><td>xs:int (totalDigits: 3)</td><td>0..1</td><td>[LOV-ID: 3022] A Status Reason set by the backend system</td></tr>
<tr><td>extRef</td><td>xs:string (minLength: 1, maxLength: 80)</td><td>0..1</td><td>An external reference provided by the ISP.</td></tr>
<tr><td>exchangeDate</td><td>xs:date</td><td>1..1</td><td>designated date for the exchange</td></tr>
<tr><td>exchangeType</td><td>xs:int (totalDigits: 3)</td><td>1..1</td><td>[LOV-ID: 3019] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)</td></tr>
<tr><td>reminderProcess</td><td>xs:int (totalDigits: 3)</td><td>1..1</td><td>[LOV-ID: 9012] LOV_REMIN</td></tr>
</table>
</td><td>0..n</td><td></td></tr>
</table>

				DER_PROCESS (1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)		
	creationDateTime	xs:dateTime	1..1			
	lastModificationDateTime	xs:dateTime	1..1			

2.20 getChangeTicketDetail

Description: gets a list of change Tickets

2.20.1 Request getChangeTicketDetailRequestType

Element	Type	Occ	Comment
ispId	xs:int (totalDigits:**6**)	1..1	An ISP ID.
changeTicketId	xs:decimal (totalDigits:**10**)	1..1	Change Ticket ID assigned by WSG

2.20.2 Response getChangeTicketDetailResponseType

Element	Type	Occ	Comment
changeTicket	changeTicketType	0..1	
workLog	workLogType	0..n	List of the work log entries
historyItem	changeTicketType	0..n	

changeTicketType

Element	Type	Occ	Comment

<table>
<tr><td>ispId</td><td>xs:int (totalDigits:6)</td><td>1..1</td><td>An ISP ID.</td></tr>
<tr><td>changeTicketId</td><td>xs:decimal (totalDigits:10)</td><td>1..1</td><td>Change Ticket ID assigned by WSG</td></tr>
<tr><td>changeTicketStatus</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 3021 Change Ticket Status</td></tr>
<tr><td>statusReason</td><td>xs:int (totalDigits:3)</td><td>0..1</td><td>[LOV-ID: 3022] A Status Reason set by the backend system</td></tr>
<tr><td>extRef</td><td>xs:string (minLength:1, maxLength:80)</td><td>0..1</td><td>An external reference provided by the ISP.</td></tr>
<tr><td>- choice:</td><td>
<table>
<tr><th>Element</th><th>Type</th><th>Occ</th><th>Comment</th></tr>
<tr><td>dnNsn</td><td>xs:string (pattern:0[1-9]\d{8})</td><td>1..1</td><td>A DN/NSN phone number.</td></tr>
<tr><td>dslam</td><td>dslam</td><td>1..1</td><td></td></tr>
</table>
</td><td>1..1</td><td></td></tr>
<tr><td>exchangeDate</td><td>xs:date</td><td>1..1</td><td>designated date for the exchange</td></tr>
<tr><td>exchangeType</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 3019] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)</td></tr>
<tr><td>reminderProcess</td><td>xs:int (totalDigits:3)</td><td>1..1</td><td>[LOV-ID: 9012] LOV_REMINDER_PROCESS</td></tr>
</table>

			(1 = first reminder at exchange date, second reminder after 5 days ; 2 = first reminder at exchange date, no second reminder)
customerContact1	customerContactType	1..1	
customerContact2	customerContactType	0..1	Customer Contact 2
creationDateTime	xs:dateTime	1..1	
lastModificationDateTime	xs:dateTime	1..1	

customerContactType

Element	Type	Occ	Comment
greetingCode	xs:int (totalDigits:**3**)	0..1	[LOV-ID: 9011] LOV_GREETING_CODE Anrede (Mr.,Ms., Firm, Unknown ...)
firstName	xs:string (minLength:**1**, maxLength:**30**)	0..1	A subject's first name.
lastName	xs:string (minLength:**1**, maxLength:**30**)	1..1	A subject's last name.
street	xs:string (minLength:**1**, maxLength:**30**)	0..1	The street name of an address.
houseNr	xs:string (minLength:**1**, maxLength:**12**)	0..1	The house number of an address.

building	xs:string (minLength:**1**, maxLength:**30**)	0..1	The building infomation of an address.
streetAppendix	xs:string (minLength:**1**, maxLength:**30**)	0..1	An additional street information (for instance: Chalet Sonneblick))
zip	xs:int (minInclusive:**1000**, maxInclusive:**999999**)	0..1	The zip of an address.
city	xs:string (minLength:**1**, maxLength:**25**)	0..1	The city of an address.
eMail	xs:string (minLength:**5**, maxLength:**100**)	0..1	An email address
mobilePhone	xs:string (pattern: **(\+)?([0-9]){7,15}**)	0..1	Mobile phone number
language	xs:string	1..1	ISO 639-1 (Codes for the representation of names of languages) (de = german; fr = french; it = italian)
communicationChannel	xs:int (totalDigits:**3**)	1..1	[LOV-ID: 3020] The way the customer should be notified

workLogType

Element	Type	Occ	Comment
workLogDateTime	xs:dateTime	1..1	
workLogSummary	xs:string (minLength:**1**, maxLength:**100**)	1..1	A summary of the work log entry.
workLogNotes	xs:string (maxLength:**32768**)	0..1	An additional comprehensive description.

2.21 getCpeReport

Description: gets all detail of one change ticket

2.21.1 Request getCpeReportRequestType

Element	Type				Occ	Comment
ispId	xs:int (totalDigits:**6**)				1..1	An ISP ID.
- ***choice:***	Element	Type	Occ	Comment	1..1	
	irIdWsg	xs:decimal (totalDigits:**10**)	1..1	Information request id.		
	fileName	xs:string (minLength:**1**, maxLength:**80**)	1..1	The file name of a response/report file.		

2.21.2 Response getCpeReportResponseType

Element	Type	Occ	Comment
success	xs:boolean	1..1	The result code for the transaction ("true" if request was successful, "false" otherwise).
reason	xs:string (pattern:**[\dA-Z]{3}**)	0..1	A 3-letter error code (aka messageId) where "000" means "ok".
reasonComment	xs:string (minLength:**1**, maxLength:**256**)	0..1	Some additional textual description for the reason.
cpeReportElement	cpeReportType	0..n	

cpeReportType

Element	Type	Occ	Comment
dnNsn	xs:string (pattern:**0[1-9]\d{8}**)	0..1	A DN/NSN phone number.
dslam	dslam	0..1	
cpeActual	cpeInfoType	1..1	
cpeVectoringCategory	xs:int (totalDigits:3)	1..1	[LOV-ID: 9009] Vectoring Capability (1 = Capable (Ok); 2 = Friendly; 3 = Alien (Not Capable); 4 = unknown (alien); 5 - Capable, but firmware upgrade

			necessary (Not Capable) ; Friendly,6 - but firmware upgrade necessary (Not Capable))
cpeVectoringCapable	xs:boolean	1..1	
cpeFirmwareVectoringCapable	xs:boolean	1..1	
detectionDate	xs:date	1..1	
exchangeType	xs:int (totalDigits:3)	1..1	[LOV-ID: 3019] What must be exchanged (1 = CPE Hardware: 2 = CPE Firmware)
cpeProposed	cpeInfoType	0..1	
changePriority	xs:int	1..1	The priority of the change.0 == minimum, 100=maximum
vectoringActivationDatePlanned	xs:date	0..1	
comment	xs:string	0..1	

cpeInfoType

Element	Type	Occ	Comment
cpeName	xs:string (maxLength:**100**)	1..1	CPE (Customer Modem) Name
cpeFirmwareVersion	xs:string (maxLength:**32**)	0..1	CPE firmware version

3 List of Values (LOVs)

See document [6] for a list of LOVs. The Id's are referenced in Annex of the WSDL definition.
Sample:
"[LOV-ID: 4004] The requested additional installation support."

4 TDM Message types

4.1 Principles

3200.01:	Is the Completion of the deactivation part of a Voice transaction.
3200.02:	Is the Completion of the activation part of a Voice transaction.
Copying enabled "Y":	Used in the following Message-Types: For Message Type 03 (Umzug), 04 Umzug CH-weit), 17 (Accesstype-change) and 16 (Change of number. Note: is always Yes for this message type): On request of an ISP WSG copies a BB-Service from the "old" location to the new location if possible. The ISP will be notifiec by Voice-Messages.
Copying enabled "N":	Used in the following Message-Types: For Message Type 03 (Umzug), 04 Umzug CH-weit), 17 (Accesstype-change): On request of an ISP WSG does not copy a BB-Service from the "old" location to the new location if possible. Only the disconnection is done. The ISP will be notified by Voice-Messages about the disconnection. The ISP may create the new BB-Service on his own at the "new" location or constellation.
Is activation "Y":	Indicates that the order is an activation.
Is activation "N":	Indicates that the order is a deactivation.
PONR:	**P**oint **O**f **N**o **R**eturn. From this point onwards a cancellation / annulment of the order is no longer possible.

A TDM Message (Time-Division-Multiplexing Telephone technique, formarly calle "Voice Message") is uniquely identified by a type and a reference from the producer system. The following list shows the available types and reference codes.

Reference	Description
APVWSG	

4.2 GV01 / Neuanschluss

Type	Process-Flow Nr.	Description

GV01 / Neuanschluss **Summary**	**Steps** 3010.11 3091/3071/3061.09 3091/3071/3061.09 3190.11 5240.05 3200.02	**copying enabled** - - - - - -	**is activation** Y Y Y Y Y Y
GV 01 / Neuanschluss	3010.11	Neuanschluss: Einschaltbegehren	
		Voice Message Text: *New Voice Line was assigned for DN: <DN1>*	
	3091.09 3071.09 3061.09	Neuanschluss: 3091.09 Schaltmeldung WSG/Einschaltung terminiert 3071.09 Schaltmeldung WSG/Schalt. durch Servispartner 3061.09 Schaltmeldung WSG/Schaltung durch Kunde **PONR** (Point of no Return)	
		Voice Message Text: *PONR for DN: <DN1>. For this Voice-Line with synchronised DSL order the activation process has started. Cancellation not possible anymore.*	
	3091.10 3071.10 3061.10	Neuanschluss: 3091.10 Schaltbestätigung/Einschaltung terminiert 3071.10 Schaltbestätigung/Schalt. durch Servispartner 3061.10 Schaltbestätigung/Schaltung durch Kunde	
		Voice Message Text: *Physical activation for DN: <DN1> confirmed. Physical activation of DSL is successful done. Waiting for configuration of DSL.*	
	3190.11	Neuanschluss: Annullation der Einschaltung	
		Voice Message Text: *Cancellation of Voice-Order for DN: <DN1>. A pending synchronised BB-Order has to wait until a new Voice-Order is submitted*	
	5240.05	Neuanschluss: Terminverschiebung der Einschaltung	
		Voice Message Text: *Change of Activation date to <VALID_ACTI_DATE>*	
	3200.02	Neuanschluss: Abschluss der Einschaltung	
		Voice Message Text: *Closure of Voice-transaction. DSL will be configured*	

4.3 GV14 / Kündigung

GV14 / Kündigung **Summary**	**Steps** 3130.06 3141.07/3151.07 3141.08/3151.08 3190.11 5240.05 3200.01	**copying enabled** - - - - - -	**is activation** N N N N N N
Disco	3130.06	Kündigung: Ausschaltbegehren	

		Voice Message Text: *Disconnect Voice: Request for voice disconnection DN: <DN1>. An existing DSL will automatically be disconnected.*
	3141.07 3151.07	Kündigung: 3141.07 Ausschaltmeldung WSG/Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG/Ausschaltung terminiert **PONR** (Point of no Return) Der Auschaltungsprozess für die Voice-Kündigung wurde gestartet.
		Voice Message Text: *Disconnection PONR for DN: <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.*
	3141.08 3151.08	Kündigung: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert Bestätigung der physikalischen Ausschaltung des Ports.
		Voice Message Text: *Physical deactivation for DN <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.*
	3190.11	Kündigung: Annullation der Ausschaltung
		Voice Message Text: *Request of Disconnection: Cancellation of Voice-Order for DN: <DN1>. A pending synchronised BB-Order has to wait until a new Voice-Order is submitted*
	5240.05	Kündigung: Terminverschiebung der Ausschaltung
		Voice Message Text: *Request for Disconnection: Change of Activation date to <VALID_ACTI_DATE>*
	3200.01	Kündigung: Abschluss der Ausschaltung
		Voice Message Text: *Request for disconnection: Closure of Voice-transaction. DSL will be disconnected.*

4.4 GV16 / Nummerwechsel

GV16 / Nummerwechsel **Summary**	**Steps**	**copying enabled**	**is activation**
	3010.11	Y	Y
	3091/3071/3061.09	Y	Y
	3091/3171/3061.10	Y	Y
	3190.11	Y	Y
	3200.02	Y	Y
	3130.06	N	N
	3151.07	N	N
	3151.08	N	N
	3190.11	N	N
	3200.01	N	N

16: Nummernwechsel		
	3010.11	Nummernwechsel: Einschaltbegehren
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.*
	3091.09 3071.09 3061.09	Nummernwechsel: 3091.09 Schaltmeldung WSG/Einschaltung terminiert 3071.09 Schaltmeldung WSG/Schaltung durch Servispartner 3061.09 Schaltmeldung WSG/Schaltung durch Kunde **PONR** (Point of no Return)
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.*
	3091.10 3071.10 3061.10	Nummernwechsel: 3091.10 Schaltbestätigung/Einschaltung terminiert 3071.10 Schaltbestätigung/Schaltung durch Servispartner 3061.10 Schaltbestätigung/Schaltung durch Kunde
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2> at <VALID_ACTI_DATE>: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL*
	3190.11	Nummernwechsel: Annullation der Einschaltung

		Voice Message Text: *Change of telephone number: from <DN1> to <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted*
	3200.02	Nummernwechsel: Abschluss der Einschaltung
		Voice Message Text: *Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.*

	3130.06	Nummernwechsel: Ausschaltbegehren
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2>: Request for disconnection of Voice service. Please check also the automatically created Broadband Disconnect order*
	3151.07	Nummernwechsel: 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert **PONR** (Point of no Return)
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.*
	3151.08	Nummernwechsel: 3151.08 Ausschaltbestätigung / Ausschaltung terminiert
		Voice Message Text: *Change of telephone number: fom <DN1> to <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.*
	3190.11	Nummernwechsel: Annullation der Ausschaltung
		Voice Message Text: *Change of telephone number: from <DN1> to <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB-Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted*

	3200.01	Nummernwechsel: Abschluss der Ausschaltung
		Voice Message Text: *Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected*

4.5 GV25 / Sistierung Aktivierung

GV25 / Sistierung Aktivierung **Summary**	**Steps** 3171.05 3171.06 3200.01	**copying enabled** - - -	**is activation** N N N
25.1: Sistierung aktiv	3171.05	Sistierungs aktiv: Meldung des Prozess-starts für die Sistierung.	
		Voice Message Text: *Temporary disconnection of voice and Broadband: Due to temporary disconnection of the voice connection, the subscriber with the telephone number <DN1> will be disconnected at <VALID_DISCON_DATE>. Swisscom will inform the customer for the temporary Voice-disconnect by letter. Please inform the Customer about the Broadband disconnection and check the Broadband Disconnect Order for DN <DN1>.*	
	3171.06	Sistierungs aktiv: Meldung des Beginns der Sistierung der Voice-Line	
		Voice Message Text: *Temporary disconnection of voice and Broadband: Confirmation of Disconnection date <VALID_DISCON_DATE>. Swisscom will inform the customer for the temporary Voice-disconnect by letter. Please inform the Customer about the Broadband disconnection and check the Broadband Disconnect Order for DN <DN1>.*	
	3200.01	Sistierung aktiv: Prozessabschluss des Beginns der Sistierung	
		Voice Message Text: *Temporary Disconnection: confirmation of disconnection.*	

GV25 / Sistierung deaktiv **Summary**	**Steps** 3171.05 3171.06 3190.11 3200.02	**copying enabled** - - - -	**is activation** Y Y Y Y
25.2: Sistierung deaktiv	3171.05	Sistierung deaktiv: Ankündigung der Reaktivierung der Voice-Linie	
		Voice Message Text: *Reactivation of Temporary disconnection of voice: the temporary disconnection of the voice connection for subscriber with telephone number <DN1> will be reactivated at <VALID_ACTI_DATE>. Swisscom will inform the customer for the Voice-line by letter. Please inform the Customer that Broadband services are possible again from <VALID_ACTI_DATE> onwards.*	
	3171.06	Sistierung deaktiv: Mutation nicht leitungsrelevante Dienste	
		Voice Message Text: *Reactivation of Temporary disconnection of voice: Confirmation that the temporary disconnection of the voice connection for subscriber with telephone number <DN1> will be reactivated at <VALID_ACTI_DATE>. Swisscom will inform the customer for the Voice-line by letter. Please inform the Customer that Broadband services are possible again from <VALID_ACTI_DATE> onwards.*	
	3190.11	Sistierung deaktiv: Annullation der Reaktivierung	
		Voice Message Text: *Cancellation of Reactivation of Temporary disconnection for <DN1> . A new Activation date will follow.*	
	3200.02	Sistierung deaktiv: Prozessabschluss	
		Voice Message Text: *Reactivation of Temporary disconnection of voice: Confirmation that the temporary disconnection of the voice connection for subscriber with telephone number <DN1> was reactivated at <VALID_ACTI_DATE>. From <VALID_ACTI_DATE> onwards Broadband can be provisioned again.*	

4.6 GV12 / Übernahme

GV12 / Übernahme **Summary**	**Steps** 5201.01 3190.11 3200.02 5201.03	**copying enabled** - - - -	**is activation** Y Y Y Y
12: Übernahme	5201.01	Übernahme: Start der Übernahme	
		Voice Message Text: *Take-over Voice connection (incl. DSL) for DN: <DN1>* *Please clarify with your customer*	
	3190.11	Übernahme: Annullation der Übernahme	
		Voice Message Text: *Cancellation for Take-over done*	
	3200.02 (5201.03)	Übernahme: Abschluss der Übernahme	
		Voice Message Text: *Closure of transaction*	

4.7 GV17 / Nummerntypwechsel Deaktivierung

GV17 / Nummern-typwechsel Deaktivierung **Summary**	**Steps** 3130.06 3141.07 / 3151.07 3141.08 / 3151.08 3190.11 5240.05 3200.01	**copying enabled** Y/N Y/N Y/N Y/N Y/N Y/N	**is activation** N N N N N N
17: Nummerntyp Wechsel (Änderung Anschlussart) (ISDN <--> PSTN), Deaktivierung	3130.06	Nummerntypwechsel: Ausschaltbegehren	
		Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Request for disconnection of Voice service.* *Please check also the automatically created Broadband Disconnect order for disconnecting the BB-Service at the old location.*	
	3141.07 3151.07	Nummerntypwechsel: 3141.07 Ausschaltmeldung WSG / Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert **PONR** (Point of no Return)	
		Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.*	

	3141.08 3151.08	Nummerntypwechsel: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert	
		Change of connection type DN old <DN1> and DN new <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.	
	3190.11	Nummerntypwechsel: Annullation der Ausschaltung	
		Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB-Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted*	
	5240.05	Nummerntypwechsel: Terminverschiebung der Ausschaltung	
		Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Change of Deactivation date to <VALID_DISCON_DATE>*	
	3200.01	Nummerntypwechsel: Abschluss der Ausschaltung	
		Voice Message Text: *Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected*	
GV17 / Nummern-typwechsel Aktivierung **Summary**	**Steps** 3010.11 3091/3071/3061.09 3091/3071/3061.10 3190.11 5240.05 3200.02 3301.14	**copying enabled** Y/N Y/N Y/N Y/N Y/N Y/N Y/N	**is activation** Y Y Y Y Y Y Y
c h l u s	3010.11	Nummerntypwechsel: Einschaltbegehren	

		Copying enabled = Y: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>.*
	3091.09 3071.09 3061.09	Nummerntypwechsel: 3091.09 Schaltmeldung WSG / Einschaltung terminiert 3071.09 Schaltmeldung WSG / Schalt. durch Servispartner 3061.09 Schaltmeldung WSG / Schaltung durch Kunde **PONR** (Point of no Return)
		Copying enabled = Y: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore.*
	3091.10 3071.10 3061.10	Nummerntypwechsel: 3091.10 Schaltbestätigung / Einschaltung terminiert 3071.10 Schaltbestätigung / Schaltung durch Servispartner 3061.10 Schaltbestätigung / Schaltung durch Kunde
		Copying enabled = Y: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL* Copying enabled = N: / Voice Message Text: *Relocation: Physical activation for DN new <DN2> confirmed.*
	3190.11	Nummerntypwechsel: Annullation der Einschaltung

		Copying enabled = Y: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted* Copying enabled = N: / Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>.*
	5240.05	Nummerntypwechsel: Terminverschiebung der Einschaltung
		Voice Message Text: *Change of connection type DN old <DN1> and DN new <DN2>: Change of Activation date for DN new <DN2> to <VALID_ACTI_DATE>*
	3200.02	Nummerntypwechsel: Abschluss der Einschaltung
		Copying enabled = Y: / Voice Message Text: *Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N: / Voice Message Text: *Closure of Voice-Activation transaction.*
	3301.14 **SPEZIALFALL**	Nummerntypwechsel: Reine Voice-Transaktion kann die Provisionierung eines BB-Orders während der Dauer der Transaktion verhindern.
		Voice Message Text: *Change of configuration of Voice-line: This voice-line is currently blocked for Broadband Orders until <VALID_ACTI_DATE>*

4.8 GV03 / 04 / 15 Umzug Deaktivierung

GV03 / 04 / 15 Umzug Deaktivierung **Summary**	**Steps** 3130.06 3141.07 / 3151.07 3141.08 / 3151.08 3190.11 5240.05 3200.01	**copying enabled** Y/N Y/N Y/N Y/N Y/N Y/N	**is activation** N N N N N N
03 / 04 / /15: Umzug (Deaktivierungsteil)	3130.06	Umzug: Ausschaltbegehren	
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Request for disconnection of Voice service. Please check also the automatically created Broadband Disconnect order for disconnecting the BB-Service at the old location.*	
	3141.07 3151.07	Umzug: 3141.07 Ausschaltmeldung WSG / Ausschaltung durch Kunde/Servicepartner 3151.07 Ausschaltmeldung WSG / Ausschaltung terminiert **PONR** (Point of no Return)	
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Disconnection PONR for DN old <DN1>. For this Voice-Line with DSL the deactivation process has started. Cancellation not possible anymore.*	
	3141.08 3151.08	Umzug: 3141.08 Ausschaltbestätigung / Ausschaltung durch Kunde/Servicepartner 3151.08 Ausschaltbestätigung / Ausschaltung terminiert	
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Physical deactivation for DN old <DN1> confirmed. Physical deactivation of DSL is successful done. Waiting for deactivation of DSL.*	
	3190.11	Umzug: Annullation der Ausschaltung	
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Disconnect Order for DN old <DN1>. The automatically created synchronised BB-Disconnect Order will be cancelled and only be set up after a new Voice-Disconnect Order is submitted*	
	5240.05	Umzug: Terminverschiebung der Ausschaltung	
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Change of Deactivation date to <VALID_DISCON_DATE>*	
	3200.01	Umzug: Abschluss der Ausschaltung	

		Voice Message Text: *Closure of Voice-Disconnect transaction for DN old <DN1>. DSL will be disconnected*

GV03 / 04 / 15 Umzug Aktivierung **Summary**	**Steps**	**copying enabled**	**is activation**
	3010.11	Y/N	Y
	3091/3071/3061.09	Y/N	Y
	3091/3071/3061.10	Y/N	Y
	3190.11	Y/N	Y
	5240.05	Y/N	Y
	3200.02	Y/N	Y

03 / 04 / /15: Umzug (Aktivierungsteil)	3010.11	Umzug: Einschaltbegehren
		Copying enabled = Y / Voice Message Text: *Relocation: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N / Voice Message Text: *Relocation: Voice Line for new DN <DN2> was assigned with planned activation date <VALID_ACTI_DATE>. DN old <DN1>.*
	3091.09 3071.09 3061.09	Umzug: 3091.09 Schaltmeldung WSG / Einschaltung terminiert 3071.09 Schaltmeldung WSG / Schalt. durch Servispartner 3061.09 Schaltmeldung WSG / Schaltung durch Kunde **PONR** (Point of no Return)
		Copying enabled = Y / Voice Message Text: *Relocation: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N / Voice Message Text: *Relocation: PONR for DN new <DN2>. For this Voice-Line the activation process was started. Cancellation not possible anymore.*
	3091.10 3071.10 3061.10	Umzug: 3091.10 Schaltbestätigung / Einschaltung terminiert 3071.10 Schaltbestätigung / Schaltung durch Servispartner 3061.10 Schaltbestätigung / Schaltung durch Kunde
		Copying enabled = Y / Voice Message Text: *Relocation: Physical activation for DN new <DN2> confirmed. Physical activation of DSL is successful done. Waiting for automatic configuration of DSL* Copying enabled = N / Voice Message Text: *Relocation: Physical activation for DN new <DN2> confirmed.*
	3190.11	Umzug: Annullation der Einschaltung

03 / 04 / /15: Umzug (Aktivierung)		Copying enabled = Y / Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>. The automatically created pending synchronised BB-Order will also be cancelled and will only be set up again after a new Voice-Activation Order is submitted.* Copying enabled = N / Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Cancellation of Voice-Order for DN new <DN2>.*
	5240.05	Umzug: Terminverschiebung der Einschaltung
		Voice Message Text: *Relocation DN old <DN1> and DN new <DN2>: Change of Activation date for DN new <DN2> to <VALID_ACTI_DATE>*
	3200.02	Umzug: Abschluss der Einschaltung.
		Copying enabled = Y / Voice Message Text: *Closure of Voice-Activation transaction. DSL will be configured. Please check also the automatically created Broadband Create order for copying the BB-Service to the new location.* Copying enabled = N / Voice Message Text: *Closure of Voice-Activation transaction.*

4.9 05 / 06 : Zeitweiliger Anschluss

05 / 06 : Zeitweiliger Anschluss	3301.00	Zeitweiliger Anschluss: Mutation leitungsrelevanter Dienst
		Temporary connection
	3010.03	Zeitweiliger Anschluss: ISLK ok.
		Temporary connection: Line quality is good for ADSL
	3020.01	Zeitweiliger Anschluss: ISLK nok.
		Temporary connection: Line quality is not sufficient for ADSL
	6010.01	Zeitweiliger Anschluss: ISLK Rückmeldung Mutation
		Temporary connection: Line is to be modified for the voice service
	6030.01	Zeitweiliger Anschluss: Zur Zeit keine Ports verfügbar
		Temporary connection: Currently no ports available
	3200.01	Zeitweiliger Anschluss: Anschluss ausgeschaltet
		Temporary connection: Disconnected (closure of transaction)
	3200.02	Zeitweiliger Anschluss: Anschluss eingeschaltet
		Temporary connection: Connection is activated
	0000.00	Zeitweiliger Anschluss: Annullation
		Temporary connection: Cancellation

4.10 37 Änderung

37 Änderung	3272.04	Korrektur Leitungs-Verlauf auf aktivem Anschluss Voice Message Text: *Adjustment of active line, new cablebox infos.* --- *NSN <DN>* *Prozess Flow Nr. 3272.04* *Transaction Date/Time <TRANS_DATETIME>*
	3272.05	Korrektur Leitungs-Verlauf auf aktivem Anschluss Voice Message Text: *Adjustment of active line, new Port Nr. infos* --- *NSN <DN>* *Prozess Flow Nr. 3272.05* *Transaction Date/Time <TRANS_DATETIME>*

4.11 GV11 Korrektur Voice

GV11 Korrektur Voice **Summary**	**Steps** 3301.14 3190.11 3200.02	**copying enabled** - - -	**is activation** Y Y Y
11 Korrektur Voice	3301.14	Voice Message Text: *KORR: Currently a Voice-Order is inhibiting Broadband Orders to be provisioned. Information about finishing of KORR will be sent with Message 3200.02 or 3190.11*	
	3190.11	Voice Message Text: *Cancellation for Take-over done*	
	3200.02	Voice Message Text: *KORR: the Voice-Order KORR is done. Provsioning of BB-Orders again possible*	
11 Special Voice-Messages	3010.90	Voice Message Text: *"Broadband not possible at new location for DN: <DN2>. Please contact your customer."* **Important Note:** This voice-message is generated when the flag Copying Enabled = Yes is set but at the new location it is not possible to provide the same service as before (For example: VDSL at "old" place, but at new place only ADSL or "no Broadband" is possible)	
	3010.91	Voice Message Text: *"This voice-line does not allow BB because of S21 fix. DN: <DN2>."* **Important Note:** This voice-message is generated when the flag Copying Enabled = Yes is set but at the new location it is not possible to provide the BB-service because of S21 Fix, which inhibits the provision of BB-Services.	
	3010.92	Voice Message Text: *"For this DN <DN2> WSG will open a voice-driven order at <HOLD_DATE>."* **Important Note:** This voice-message is generated when WSG identifies in the south-bound Fullfillment system a pendig voice-Order but will **not yet open** the order due to technical restrictions. In this case WSG notifies the date, when (Date) the automatically created order will be opened.	

5 Web Service Interface

5.1 Security

The following sections describe the implemented precautions aiming to improve the security of data transport in terms of confidentiality and non-repudiation.

5.1.1 Encryption

To meet the confidentiality aspect of information security the data transport between the web service client and its server is protected using the https schema.
Https is a URI scheme equivalent to the http scheme, originally intended to be used with the HTTP protocol, but with added encryption layer. The URI structure is the same, except that URIs begins with "https:" rather than "http:". The scheme was invented by Netscape Communications Corporation to provide authentication and encrypted communication and is widely used on the Web for security-sensitive communication, such as payment transactions.
Instead of using plain text socket communication, the session data is encrypted using either a version of the SSL (Secure Socket Layer) protocol or the TLS (Transport Layer Security) protocol, thus ensuring reasonable protection from eavesdroppers, and man in the middle attacks. The default TCP port of https: is 443.

5.1.2 Authentication, Authorization, and Accounting (AAA)

To meet the accountability and non-repudiation aspects of information security each Web Service requires username tokens according to the OASIS Web Service Security (WS-Security) definition.
Please consult Appendix A for further details.

5.2 Model: WSDL and XML Schemas

5.2.1 Overview

The interface is defined by the **wsgBbOutbound.wsdl (B2B)** and the **wsgLqsSaq.wsdl (SAQ).** Both WSDL inports Data Types from XSD-files. The files are included in document in a ZIP file (see chapter 2.1 Overview)

5.2.2 Overview of supported Versions

The following table lists the supported versions for XML fulfillment requests

Port	Namespace	Remark
WsgBb**V026**	http://www.swisscom.com/wsg/bb/v26	**current** fulfillment interface
WsgBbV024	http://www.swisscom.com/wsg/bb/v25	deprecated Fulfillment interface
LqsQualiV026	http://www.swisscom.com/wsg/bb/v26	**current** SAQ interface
LqsQualiV024	http://www.swisscom.com/wsg/bb/v25	deprecated SAQ interface

5.2.3 The WSG BB Outbound Web Service

The WSG BB Outbound Web is published under the following URLs:

Platform	URL	Description
Prod-uction	https://webservices.swisscom.com/wsg/prod/bb/WsgBbV026	Production environment, actual version.
	https://webservices.swisscom.com/wsg/prod/bb/WsgBbV025	Production environment, previous version.
ISP-Test	https://webservices.swisscom.com/wsg/isp/bb/WsgBbV026	Test environment for ISPs, actual version.
	https://webservices.swisscom.com/wsg/isp/bb/WsgBbV025	Test environment for ISPs, previous version.

5.2.4 The WSG LQS Service Availability Qualification (SAQ)

The WSG LQS Service Availability Qualification is published under the following URLs:

Platform	URL	Description
Prod-uction	https:// webservices.swisscom.com/wsg/prod/lqs/LqsQualiV026	Production environment, actual version.
	https:// webservices.swisscom.com/wsg/prod/lqs/LqsQualiV025	Production environment, previous version.
ISP-Test	https:// webservices.swisscom.com/wsg/isp/lqs/LqsQualiV026	Test environment for ISPs, actual version.
	https:// webservices.swisscom.com/wsg/isp/lqs/LqsQualiV025	Test environment for ISPs, previous version.

5.2.5 Deprecated Versions

With this software release a new version of the Fulfillment B2B specification is provided (according the table above); all new development activities shall use this version.
The previous version (version number one level lower than the new one) remains valid, but will become deprecated as soon as a possible next version of this interface will be created and published.

5.2.6 Multiple Versions

The XML schemas are versioned by their namespace. The ISP have thus to provide the correct namespace within the submitted XML-request according to the version of interface which is being invoked (correct declaration of root-attribute "xmlns").
Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
        ...
        ...
  </soapenv:Header>
  <soapenv:Body>
    <createCustomerOrder xmlns="http://www.swisscom.com/wsg/bb/v16">
      <request correlationId="abc1234510001">
        <ispId>777710</ispId>
        ...
        ...
```

```
    </request>
  </createCustomerOrder>
 </soapenv:Body>
</soapenv:Envelope>
```

5.2.7 Correlation from request to response

The attribute ***correlationId***, which is to provide within each ***request***-element of uploaded requests and which is returned within each ***response***-element, serves to correlate from a request to its response. Pay attention to provide a unique identifier to permit this correlation.

Example:

Request:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:v16="http://www.swisscom.com/wsg/bb/v16" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
     ...
  </soapenv:Header>
  <soapenv:Body>
    <v16:createCustomerOrder>
      <v16:request correlationId="abc1234510001">
        <v16:ispId>777710</v16:ispId>
          ...
          ...
        <v16:order xsi:type="v16:modifyType" correlationId="xyz1">
          ...
          ...
        </v16:order>
        <v16:order xsi:type="v16:addType" correlationId="zyx2">
          ...
          ...
        </v16:order>
      </v16:request>
    </v16:createCustomerOrder>
  </soapenv:Body>
</soapenv:Envelope>
```

Acknowledge-response:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <createCustomerOrderResponse xmlns="http://www.swisscom.com/wsg/bb/v16">
      <response correlationId="abc1234510001">
          ...
          ...
        <orderItem correlationId="xyz1">
          ...
          ...
        </orderItem>
        <orderItem correlationId="ord2">
          ...
          ...
        </orderItem>
      </response>
    </createCustomerOrderResponse>
  </soapenv:Body>
```

```
</soapenv:Envelope>
```

6 General Qualification Information

This section gives special information on the use of the qualification Service
The WSG-interface to the Qualification Service enables ISPs to implement the LQS qualification as an on-line xDSL query service on their website using the BBCS Qualification Web-Service.
The term "xDSL" stands for: ADSL, SDSL, VDSL and since November 2009: BX

Definition of profile types for this document:

Item	Definition
Service-Profile	The service-profile characterizes the product (speed) which the customer uses. The price for the customer results from the used product.
Access-Profile	The access-profile characterizes the speed with that the network-access is configured. Other term wich means the same: network profile
Fair Use Profile	This is a specific profile for fibre-provisioning. Technically it is a access profile but can be ordered by the ISP similar to a service profile

6.1 Purpose of the xDSL check facility

The xDSL Check enables end customers to find out whether their subscriber lines are suitable for ADSL, VDSL, SDSL or BX and if so, which speed profiles are available. Availability differs for analogue (POTS) and digital (ISDN) lines, but a POTS customer can query as if he had an ISDN connection and vice versa. If the subscriber line is not suitable for ADSL, VDSL, SDSL or BX the xDSL check reports the technical limitation. The facility also detects whether or not the end customer's local exchange presently supports xDSL. If not, the xDSL check will convey the date planned for the upgrade of the central exchange, if available.

Advantages of the Check-Facility:

- This Service enables ISPs to meet End customer needs quickly and easily.
- As the data is always current, the responses are up to date.
- For those exchanges which do not yet support xDSL, the customer is informed of the anticipated implementation date, if it is scheduled
- The xDSL Check Facility is provided free of charge by FWS.

6.2 Qualification

6.2.1 ADSL

The ISP can use the xDSL Check to qualify for ADSL by setting the Parameter Technology to 'ADSL' during the request. The qualification can occur using the address or the active telephone number (DN). If the address is entered without the active telephone number, the xDSL check will respond with Status OK_STAO, meaning that ADSL is theoretically deliverable but cannot be verified for a specific line or speed profile. The effective bandwidth may differ from the speed profile indicated in the xDSL response. Further, a variety of additional customer premise equipment could hinder the implementation of ADSL at the customer site.

If the address is entered and an existing voice line can be identified, the xDSL check will respond with a Status OK meaning that ADSL is definitely qualified for this specific line. However, when the address is entered and no subscriber could be identified or no voice line exists, the xDSL check will respond with a Status OK_STAO, meaning that ADSL is theoretically deliverable but cannot be verified for a specific line or speed profile.

Queries using the active Directory Number (DN) will always generate a definitive qualification, or Status OK.

With regard to other faults and technical limitations on the circuit, the standard message codes apply.

6.2.2 SDSL

The ISP can use the xDSL Check to qualify for SDSL by setting the Parameters Technology to 'SDSL' during the request. The qualification can occur using the address, the active telephone number (DN), or the Billing number (NSN or 'Network Service Number'). If the check is performed with the address but without the name, the Status "OK_STAO" is given. This means that SDSL is (in principle) possible but since no specific connection could be qualified the actual effective transmission rate can vary from the values provided with the check. In this case, the effective bandwidth may differ from the speed profile indicated in the xDSL response.

If the check is performed successfully with the name and address, and the subscriber exists, and has an active SDSL connection the Status "OK" is given since the connection was able to be qualified. If the check is performed with the name and address but only a voice connection is active, the status "OK_STAO" is given since the connection could not be identified.

Queries using the active Network Service Number (NSN) with SDSL Service will always generate a definitive qualification, or Status OK.

Queries using the active Voice Number (DN) will always generate a conditional qualification, or Status OK_STAO, because the specific circuit could not be identified.

With regard to other faults and technical limitations on the circuit, the standard message codes apply.

6.2.3 VDSL

The ISP can now use the xDSL Check to qualify for VDSL by setting the Parameter Technology to 'VDSL2' during the request. The qualification can occur using the address or the active telephone number (DN).

The ADSL rules apply also to VDSL!

6.2.4 BX

The ISP can use the xDSL Check to qualify for BX by setting the Parameter Technology to BX and

contract element to 'BBCS-F (Fiber)' during the request. The qualification can occur using the socket id and plug nr (optional). If no plug nr is entered, the xDSL check will respond with Status OK and a list of the plugs are returned. The effective bandwidth may differ from the speed profile indicated in the xDSL response. Queries using the socket id/plug nr will always generate a definitive qualification. Further, a variety of additional customer premise equipment could hinder the implementation of BX at the customer site.
With regard to other faults and technical limitations on the circuit, the standard message codes apply.
Qualification by address is available by Service Availability Qualification (SAQ) only. SAQ will respond a location with the sockets, or a list of locations only, if the address is not specific enough. The SAQ response will never contain speed profiles.

6.2.5 Qualification with Address

The parameter "street" in an address request is not obligatory. If there are no value for street or the parameters are not transmitted in the request (that means a request only with zip or city), the Public Check will do a Qualification with an average result of the entire city if there are not too many possible starting points.
This feature is implemented for the qualification of locations with no street names, which happens to appear in very small villages.
If there are too many possible starting points, the Public Check will return an error message.
If the result of a request with an address and the name (first / last name) includes more than one active number, than the Public Check response has the status "OK_STAO". For example, that happens if the same person has an active voice number and an active SDSL number.

6.3 General Response Description

6.3.1 Speed profiles in case of positive response

The long distance service is based upon a max. 1000 Kbps downstream / 100 Kbps upstream profile that operates in adaptive rate mode. This means that the xDSL modem and the DSLAM select in minimum the highest possible bandwidth between 600 Kbps downstream / 100 Kbps upstream and 300 Kbps downstream / 50 Kbps upstream.
The business offering for xDSL contains four profiles: 300 Kbps downstream / 300 Kpbs upstream, max. 600 Kbps downstream / 600 Kbps upstream and 6000 Kbps downstream / 600 Kbps upstream. For each main profile, there is a fallback profile, which shall be applied if the main profile cannot be offered to the customer for distance reasons. The highest possible profile within a profile group will be delivered. The actual delivered profile may or may not be shown to the ISP or End customer.

For a list of possible speed profiles please refer the document [4] B2B Speed Profiles.

6.4 Possible reasons for a negative response

The system may provide a negative qualification result ("nok") and a specific error code (Q<nn>).
Please refer the document [1] WSG Messages for a list of possible qualification error codes and their meaning.

7 Appendix A

7.1 Securing a WEB-Service with Powergate

A WEB-Service can be secured by using WSS Security (ref. OASIS Standard http://www.oasis-open.org/specs/index.php#wssv1.0). WSS Security Tokens have to be included in the header of the SOAP Requests. Realizing this feature is dependent of the implementation of the WS Clients.
The header has to look as follows:

```
<soapenv:Header>
    <wsse:Security
        soapenv:actor="http://schemas.xmlsoap.org/soap/actor/next"
        soapenv:mustUnderstand="0"
        xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
        <wsse:UsernameToken>
            <wsse:Username>586221</wsse:Username>
            <wsse:Password>xxxxxx</wsse:Password>
        </wsse:UsernameToken>
    </wsse:Security>
</soapenv:Header>
```

Concerning "Username" and "Password" please refer to 7.5 Login .

7.2 Setting up a new WEB-Service

1. Determining the URL for the WEB-Service
2. Implementing the client in such a way that the WSS Security Tokens are included in the SOAP (see following example).

7.3 Sample Client with wss4j

wss4j will be used for creating the WSS Header (ref. http://ws.apache.org/wss4j/). The called service offers the method "list()"which will return the received header as a string.

```
public String[] doCall(
                com.swisscom.powergate.ws.TestwsSoapBindingStub binding)
                throws Exception {

        String userName = "58622141964";
        String pwd = "tXVLsD43";

        Stub bindingStub = (Stub) binding;

        Document doc = DocumentBuilderFactory.newInstance()
                        .newDocumentBuilder().newDocument();
```

```
                Element element = doc.createElementNS(WSConstants.WSSE_NS_OASIS_1_0,
                                "wsse:" + WSConstants.USERNAME_TOKEN_LN);

                WSSecurityUtil.setNamespace(element, WSConstants.WSSE_NS_OASIS_1_0,
                                WSConstants.WSSE_PREFIX);

                // create username element
                Element elementUsername = doc.createElementNS(
                                WSConstants.WSSE_NS_OASIS_1_0, "wsse:"
                                                + WSConstants.USERNAME_LN);
                WSSecurityUtil.setNamespace(elementUsername,
                                WSConstants.WSSE_NS_OASIS_1_0, WSConstants.WSSE_PREFIX);
                elementUsername.appendChild(doc.createTextNode(userName));
                element.appendChild(elementUsername);

                // create password element
                Element elementPassword = doc.createElementNS(
                                WSConstants.WSSE_NS_OASIS_1_0, "wsse:"
                                                + WSConstants.PASSWORD_LN);
                WSSecurityUtil.setNamespace(elementPassword,
                                WSConstants.WSSE_NS_OASIS_1_0, WSConstants.WSSE_PREFIX);
                elementPassword.appendChild(doc.createTextNode(pwd));
                element.appendChild(elementPassword);

                // set the header
                bindingStub.setHeader(WSConstants.WSSE_NS_OASIS_1_0, "wsse:Security",
                                element);
                assertNotNull("binding is null", binding);

                // Time out after a minute
                binding.setTimeout(60000);

                return binding.list();

        }

        public void testHeaders() throws Exception {

                com.swisscom.powergate.ws.TestwsSoapBindingStub binding;
                try {

                        binding = (com.swisscom.powergate.ws.TestwsSoapBindingStub) new
com.swisscom.powergate.ws.TestWSServiceLocator()
                                        .gettestws(new URL(
                                        "https://www.zugang.ch:44300/bg/services/testws"));

                        Stub bindingStub = (Stub) binding;

                        // keep session
                        bindingStub.setMaintainSession(true);

                        System.out.println("\n\rCALL 1");
                        String[] headers = doCall(binding);
                        for (int i = 0; i < headers.length; i++) {
                                System.out.println(headers[i]);
                        }

                        System.out.println("\n\rCALL 2");
                        headers = doCall(binding);
                        for (int i = 0; i < headers.length; i++) {
                                System.out.println(headers[i]);
                        }

                } catch (javax.xml.rpc.ServiceException jre) {
```

```
                    if (jre.getLinkedCause() != null)
                        jre.getLinkedCause().printStackTrace();
                    throw new junit.framework.AssertionFailedError(
                                "JAX-RPC ServiceException caught: " + jre);
                }
                assertNotNull("binding is null", binding);

                // Time out after a minute
                binding.setTimeout(60000);

        }
```

7.4 Errors

Authentication error

In case of an authentication error the system will return *HTTP Status 403 Forbidden*. The error will be returned inside the SOAP body as <SOAP-ENV:Fault:

```
<SOAP-ENV:Fault>
  <faultcode>SOAP-ENV:Client</faultcode>
  <faultstring>Authentication required (realm='soap')</faultstring>
</SOAP-ENV:Fault>
```

Backend Server not available:

```
HTTP/1.1 502 Bad Gateway
Date: Thu, 20 Apr 2006 11:49:22 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache
Content-Type: text/xml

<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
                <faultcode>SOAP-ENV:Server</faultcode>
                <faultstring>Upstream server is not available</faultstring>
                <faultactor>https://wstest.swisscom.com/wsg/omso1/bb/WsgBb</faultactor>
                <detail>Upstream server is not available</detail>
        </SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Error on the Backend Server

Here an example in the form of a standard http error:

```
HTTP/1.1 500 Internal Server Error
Date: Wed, 19 Apr 2006 14:27:03 GMT
Server: Apache
```

```
Set-Cookie: Navajo=AUcAUVoasEVlDVm29EUVyRYuqxwWRG4ozwlKJEewSpvKoVwVEz9mjIclAEQ0goaIH3ZnB9g/RXA-; path=/; secure;
HttpOnly
Set-Cookie: JSESSIONID=AEC47F88F1B35E4329C5C58F40841B4E; path=/wsg/e2e/bb/wsg-outbound; secure; HttpOnly
Content-Type: text/xml;charset=utf-8
Connection: close

<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope
        xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <soapenv:Body>
                <soapenv:Fault>
                        <faultcode xmlns:ns1="http://xml.apache.org/axis/">
                                ns1:Client
                        </faultcode>
                        <faultstring>No such operation 'list'</faultstring>
                        <detail>
                                <ns2:hostname xmlns:ns2="http://xml.apache.org/axis/">
                                        sbe18304.swissptt.ch
                                </ns2:hostname>
                        </detail>
                </soapenv:Fault>
        </soapenv:Body>
</soapenv:Envelope>
```

Wrong URL (Webservice not existing)

```
HTTP/1.1 404 Not Found
Date: Wed, 19 Apr 2006 14:30:38 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache
Content-Type: text/xml

<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
                <faultcode>SOAP-ENV:Client</faultcode>
                <faultstring>mapping for request URI '/wsgdf/e2e/bb/WsgBb' not found</faultstring>
                <faultactor>https://wstest.swisscom.com/wsgdf/e2e/bb/WsgBb</faultactor>
                <detail>mapping for request URI '/wsgdf/e2e/bb/WsgBb' not found</detail>
        </SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

No authorisation for the service but valid Login

```
HTTP/1.1 403 Forbidden
Date: Wed, 19 Apr 2006 14:31:40 GMT
Server: Apache
Pragma: no-cache
Connection: close
Cache-Control: no-cache
Content-Type: text/xml

<?xml version="1.0" encoding="utf-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
```

```
                <faultcode>SOAP-ENV:Client</faultcode>
                <faultstring>Your are not authorized to access the requested resource</faultstring>
                <faultactor>https://wstest.swisscom.com/wsg/prod/bb/WsgBb</faultactor>
                <detail>Your are not authorized to access the requested resource</detail>
        </SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

7.5 Login from the user point of view

Two possibilities can be used for Login:

- Login with **PUI** (Personal User Identification: 11-digit number) and **Password** (4 – 15 characters). The PUI will be sent to the user by email or letter after registration. It has to be used for the first Login.
  The password will be sent to the user by letter and can be changed arbitrarily by the user after the first Login.
- Login with username unique alphanumeric identification) and **Password** (4 – 15 digits).
  The username (formerly also known as synonym) van be created by the user after the first login with the PUI. It must start with an alphabetic character, must be 8-20 characters in length and must be unique. Maybe the user needs several trials till a unique and not yet used name could be found.
  The password will be sent to the user by letter and can be changed arbitrarily by the user after the first Login.